

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TENNESSEE  
AT CHATTANOOGA**

DWIGHT B. PLEMMONS, on behalf of  
himself and all others similarly situated,

Plaintiff,

v.

VOLKSWAGEN AG, VOLKSWAGEN  
GROUP OF AMERICA, INC.,  
VOLKSWAGEN GROUP OF AMERICA  
CHATTANOOGA OPERATIONS, LLC,  
VOLKSWAGEN OF AMERICA, INC., AUDI  
OF AMERICA, LLC, and AUDI AG,

Defendants.

Case No.

JURY TRIAL DEMANDED

**CLASS ACTION COMPLAINT**

Plaintiff, Dwight B. Plemmons, brings this action on his own behalf and on behalf of a class of similarly situated persons against Volkswagen AG (“VWAG”), Volkswagen Group of America, Inc., Volkswagen of America, Inc. (collectively, “VWoA”), Volkswagen Group of America Chattanooga Operations, LLC, and Audi of America, LLC and Audi AG (collectively, “Audi”). Unless otherwise indicated herein, all of these defendants will be referred to collectively as “Volkswagen.” Plaintiff seeks injunctive relief and to recover damages caused by Volkswagen’s violations of Section 2 of the Sherman Antitrust Act (15 U.S.C. § 2), the Racketeer Influenced and Corrupt Organizations Act (“RICO”) (18 U.S.C. § 1961 *et seq.*), the Magnuson-Moss Warranty Act (15 U.S.C. § 2301 *et seq.*), the common law of fraud and unjust enrichment and the statutory laws of North Carolina. Plaintiff makes the following allegations upon information and belief, except as to those allegations pertaining to the named Plaintiff, which are made on personal knowledge.

## **I. NATURE OF THE ACTION.**

1. Four years ago, Martin Winterkorn (“Winterkorn”), Volkswagen’s former Chief Executive Officer (“CEO”), announced Volkswagen’s goal to become the world’s largest automaker. “By 2018,” he told U.S. politicians gathered for the opening of a Volkswagen plant in Chattanooga, Tennessee, “we want to take our group to the very top of the global car industry.”<sup>1</sup> With only a relatively small share of the gigantic United States market, Winterkorn’s ambitious plan required a dramatic increase in sales in that market. The way to increase sales here, Volkswagen apparently decided, was to convince American consumers that its diesel-powered cars were a superior alternative, with better fuel efficiency, lower emissions, and uncompromised performance.

2. Between 2009 and September 18, 2015, Volkswagen aggressively marketed its so-called Clean Diesel Turbocharged Direct Injection (“TDI”) light passenger vehicles in the United States, spending millions of dollars on print, television, internet and point-of-sale advertising aimed at convincing American consumers that its cars were environmentally-friendly, fuel-efficient, powerful, and reasonably priced. In order to increase its market share, Volkswagen’s cars needed all those attributes to win over a skeptical American public. Compared with Europe, with its higher fuel costs, expensive cars and less stringent tailpipe emission standards, the United States market was a tough sell for diesel-powered passenger cars.

3. Until September 18, 2015, it looked as if Winterkorn’s ambitious plan had succeeded. In July of 2015, Volkswagen surpassed Toyota Corporation (“Toyota”) as the world’s largest automaker, selling 5.04 million vehicles in the first six months of this year,

---

<sup>1</sup> [http://www.nytimes.com/2015/09/27/business/as-vw-pushed-to-be-no-1-ambitions-fueled-a-scandal.html?\\_r=0](http://www.nytimes.com/2015/09/27/business/as-vw-pushed-to-be-no-1-ambitions-fueled-a-scandal.html?_r=0).

compared to Toyota's 5.02 million.<sup>2</sup>

4. As noted above, the United States was a key part of this global strategy. As reported in *Automotive News*:

Back in 2007, the automaker vowed to crank up U.S. sales of its VW brand to 800,000 vehicles a year by 2018. It was a dizzying sum, requiring more than a tripling of its volume at that time. Many in the industry scoffed.

But with steady precision, VW got the skeptics to take a second look. It launched a lower-priced, Mexico-made Jetta and built a plant in Chattanooga that began churning out a new Passat that better fit American tastes and budgets. VW sales doubled between 2009 and 2012, to nearly 440,000, lifting hopes that 800,000 was doable.<sup>3</sup>

By October 1, 2015, VWoA had reported sales of 264,215 passenger vehicles in the United States from January 1, 2015 to September 15, 2015, indicating that before the scandal, which is the subject of this Complaint, surfaced, it was expecting another excellent sales year.<sup>4</sup>

5. Unfortunately for American consumers, Volkswagen's success in capturing market share was based on a lie. On September 18, 2015, the United States Environmental Protection Agency ("EPA") and the California Air Resources Board ("CARB") both notified Volkswagen that it had violated federal and state laws and regulations by using a "defeat device"--software specifically intended to circumvent emission test procedures established by the EPA and by CARB. Those notices are attached as Exhibits 1 and 2 to this Complaint.

6. Volkswagen's "defeat device" is a "sophisticated software algorithm"<sup>5</sup> that

---

<sup>2</sup> <http://www.usatoday.com/story/money/2015/07/28/volkswagen-surpasses-toyota-worlds-largest-automaker-first-half-2015/30772509/>.

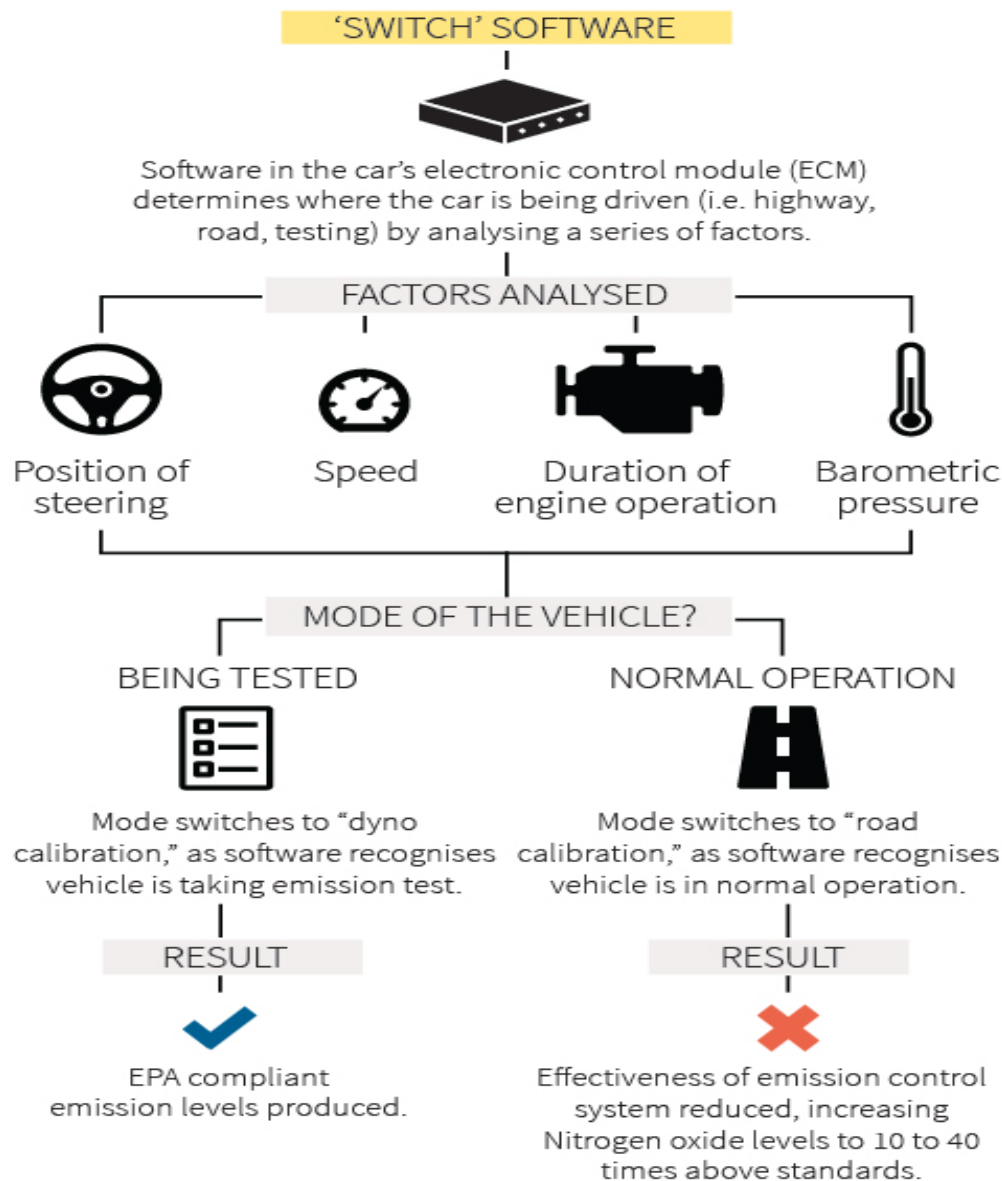
<sup>3</sup> <http://www.autonews.com/article/20150126/RETAIL01/301269949/how-vw-veered--off-target>.

<sup>4</sup> <http://media.vw.com/release/1080/>.

<sup>5</sup> <http://www.theguardian.com/business/2015/sep/18/epa-california-investigate-volkswagen-clean-air-violations>.

detects when the car is undergoing emissions testing. Under such laboratory test conditions, Volkswagen's vehicles pass the EPA and CARB emissions tests with flying colors. Under normal driving situations, however, the software algorithm *turns off* the emissions control systems, allowing the cars to spew as much as 40 times the allowable amount of pollutants--specifically nitrogen oxides ("NOx")--into the air. Elevated NOx contributes to the creation of ozone and smog, and is linked to asthma attacks, other respiratory diseases such as emphysema and bronchitis, and causes premature death. A diagram below published in Reuters depicts its operation:

# How Volkswagen's defeat device works



Source: U.S. Environmental Protection Agency

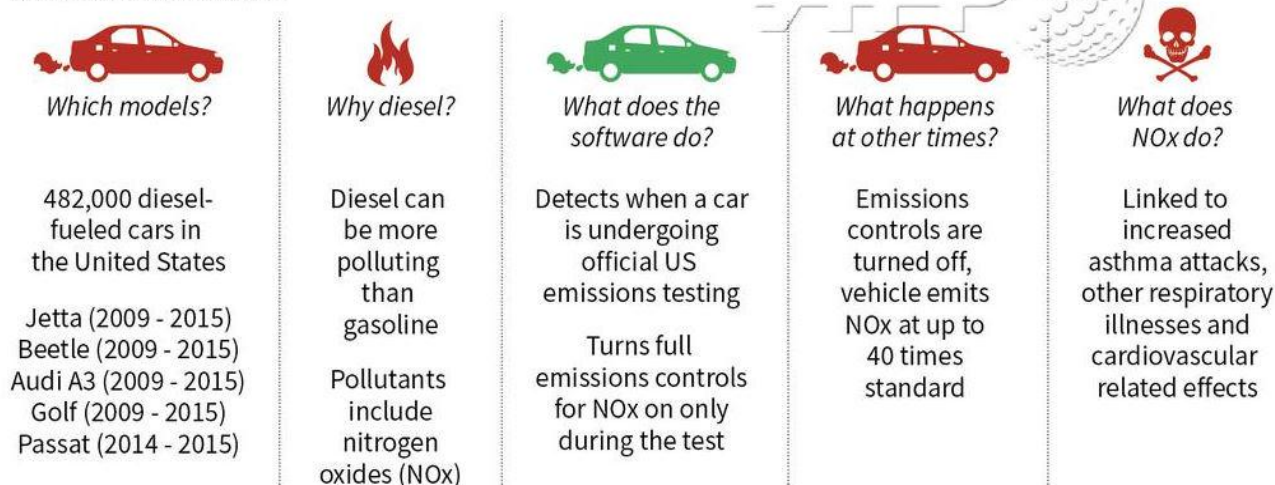
J. Wang, 22/09/2015

REUTERS

7. The chart below, published by *Agence France Press*, provides a useful and concise primer on the known facts:

## Volkswagen's alleged pollution-hiding cars

US Environmental Protection Agency says VW admitted it had equipped cars with software to cheat emissions tests



Source : USEPA/Autoneews.com

AFP

8. As noted below, dozens of fatalities in the United States over the last seven years have been attributed to the illegal use of this “defeat device.” The scandal has been popularly referred to as “Dieselgate.”

9. Volkswagen has admitted to installing these “defeat devices” in 11 million diesel vehicles that have been sold around the world, including the 482,000 in the United States. As Michael Horn (“Horn”), the President and CEO of VWoA, candidly admitted: “[l]et’s be clear about this. **Our company was dishonest. With the EPA, and the California Air Resources**

**Board, and with all of you. And in my German words, we have totally screwed up.”**<sup>6</sup> (Emphases added). Horn further stated in a video on VWAG’s website that **“[o]ur company betrayed the trust of you, our customers, our employees, our dealers and the public.”**<sup>7</sup> (Emphases added). And as VWAG has posted on its website: **“[g]overnment regulations limit the use of engine software that reduces the effectiveness of a vehicle’s emissions control systems. Those are the ‘defeat device’ regulations, and regrettably, VW violated those regulations. We take full responsibility – and deeply regret that this happened.”**<sup>8</sup> (Emphases added). In a September 23, 2015 press release available on VWAG’s website, the Executive Committee of VWAG’s Supervisory Board (“Board”) stated: **“[t]he Executive Committee takes this matter extremely seriously. The Executive Committee recognizes not only the economic damage caused, but also the loss of trust among many customers worldwide.”**<sup>9</sup> (Emphases added). Or, as Berthold Huber (“Huber”), Deputy Chairman of the Board, was quoted as saying in a September 25 press release, **“[t]he test manipulations are a moral and political disaster for Volkswagen. The unlawful behavior of engineers and technicians involved in engine development shocked Volkswagen just as much as it shocked the public.”**<sup>10</sup> (Emphases added).

10. In light of the scandal, VWAG’s Board forced Winterkorn to resign as CEO of

---

<sup>6</sup> <http://www.roadandtrack.com/new-cars/car-technology/news/a26774/volkswagen-ceo-we-screwed-up/>. A YouTube video of this extraordinary concession can be found here: [www.youtube.com/watch?v=Q6z8uUJE-jE](http://www.youtube.com/watch?v=Q6z8uUJE-jE).

<sup>7</sup> <https://www.vwdieselinfor.com/>.

<sup>8</sup> <http://www.vwdieselinfor.com/faqs/>.

<sup>9</sup> [http://www.volkswagenag.com/content/vwcorp/info\\_center/en/news/2015/09/AR\\_Erklaerung.html](http://www.volkswagenag.com/content/vwcorp/info_center/en/news/2015/09/AR_Erklaerung.html).

<sup>10</sup> [http://www.volkswagenag.com/content/vwcorp/info\\_center/en/news/2015/09/Erklaerung.html](http://www.volkswagenag.com/content/vwcorp/info_center/en/news/2015/09/Erklaerung.html).

VWAG on September 23.<sup>11</sup> In doing so, he stated, **“I accept responsibility for the irregularities that have been found in diesel engines.”** (Emphases added).<sup>12</sup> He further observed that **“[m]illions of people across the world trust our brands, our cars and our technologies. I am endlessly sorry that we have disappointed this trust. I apologize in every way to our customers, to authorities and the whole public for the wrongdoing.”**<sup>13</sup> (Emphases added). He professed surprise that **“misconduct on such a scale”** (emphases added) occurred within the Volkswagen group, suggesting that he had no knowledge of it.<sup>14</sup> It has been reported that Winterkorn was being investigated for fraud in connection with the conduct at issue here by prosecutors in Lower Saxony; however, more recently, those prosecutors have stated that any prosecution will await further factual information.<sup>15</sup>

11. Volkswagen has ordered its authorized dealers (“Volkswagen Authorized Dealers”) to cease selling the vehicles in which the defeat devices are installed. These include at least the VW Jetta TDI (Model Years 2009-15), the VW Jetta SportWagen TDI (Model Years

---

<sup>11</sup> <http://www.spiegel.de/international/business/falsified-emissions-scandal-push-volkswagen-to-limits-a-1055897.html>

<sup>12</sup> <http://www.nytimes.com/2015/09/24/business/international/volkswagen-chief-martin-winterkorn-resigns-amid-emissions-scandal.html>. Notably, however, Winterkorn plans to stay as the Chairman of the Board of Directors of Porsche Automobil Holding SE, which owns a 52% controlling stake in VWAG; he is also still demanding payment of the ten million Euros owed to him under his employment contract, which does not expire until 2016.  
<http://www.spiegel.de/international/business/falsified-emissions-scandal-push-volkswagen-to-limits-a-1055897.html>.

<sup>13</sup> <http://www.chicagotribune.com/business/ct-volkswagen-emissions-scandal-20150922-story.html>.

<sup>14</sup> [http://www.salon.com/2015/09/24/i\\_am\\_stunned\\_that\\_misconduct\\_on\\_such\\_a\\_scale\\_was\\_possible\\_what\\_you\\_need\\_to\\_know\\_about\\_the\\_volkswagen\\_mega\\_scandal/](http://www.salon.com/2015/09/24/i_am_stunned_that_misconduct_on_such_a_scale_was_possible_what_you_need_to_know_about_the_volkswagen_mega_scandal/).

<sup>15</sup> <http://www.autonews.com/article/20151001/COPY01/310019972/german-prosecutors-backtrack-on-winterkorns-role-in-vw-probe>.



2009-14), the VW Golf TDI (Model Years 2010-15), the VW Golf SportWagen TDI (Model Year 2015), the VW Beetle TDI and VW Beetle Convertible TDI (Model Years 2012-15), the VW Passat TDI (Model Years 2012-15) and the Audi A3 TDI (Model Years 2010-15).<sup>16</sup> These affected vehicles are referred to in this Complaint as the “Class Vehicles.”

12. In addition to the forced resignation of Winterkorn, Volkswagen’s internal investigation has resulted so far in the suspension of three executives: (a) Heinz-Jakob Neusser (“Neusser”); (b) Ulrich Hackenberg (“Hackenberg”); and (c) Wolfgang Hatz (“Hatz”).<sup>17</sup> Spiegel Online described Hackenberg’s departure, which was also typical of the others: “[h]e received news of his immediate suspension from the personnel department and was asked to turn in his company phone and leave his office. He has also been told not to set foot on company premises.”<sup>18</sup>

13. None of these people are mere obscure midlevel engineers. Hackenberg is a VWAG Board member for Technical Development.<sup>19</sup> The same Spiegel Online article described Hackenberg as “a long-time confidant of Winterkorn and, up until just a few days ago, one of the most powerful men at VW.” Hatz is a Porsche AG (“Porsche”) Board of Management member in charge of Research and Development and is additionally Head of Engines and Transmissions Development for the Volkswagen Group.<sup>20</sup> Neusser was responsible for engine development at

---

<sup>16</sup> <http://www.thetruthaboutcars.com/2015/09/vw-audi-canada-halting-sales-tdi-cars-following-us-inquiry/>; <http://www.vwdieselinfo.com/faqs/>.

<sup>17</sup> <http://uk.reuters.com/article/2015/09/29/uk-volkswagen-emissions-idUKKCN0RS0U620150929>.

<sup>18</sup> <http://www.spiegel.de/international/business/falsified-emissions-scandal-push-volkswagen-to-limits-a-1055897.html>.

<sup>19</sup> <http://www.audi.com/corporate/en/company/corporate-management/members-of-the-board/ulrich-hackenberg.html>.

<sup>20</sup> [http://press.porsche.com/more\\_about/executives/pag/hatz.php](http://press.porsche.com/more_about/executives/pag/hatz.php).

Porsche commencing in 1998 and drivetrain development commencing in 2011; in October of 2012, he succeeded Hatz as Head of Powertrain Development at the Volkswagen Group.<sup>21</sup>

14. The same Spiegel Online article notes that Hans-Dieter Pötsch (“Pötsch”), the VWAG Finance Chief and Board Chairman of VWAG, may also be under investigation by regulatory authorities. As discussed below, Volkswagen told the EPA about the use of a defeat device on September 3, but disclosed it publicly only on September 20. “[T]he finance chief remained silent for 17 days. During these 17 days, hundreds of thousands of investors bought VW stock. When the scandal was finally made public on Sept. 20, the price of VW shares plunged by 40 percent, costing stockholders €35 billion.”<sup>22</sup> VWAG’s shares have been on a steady decline ever since, as reflected in this graphic from the *Telegraph* in the United Kingdom:



<sup>21</sup>

[http://www.volkswagenag.com/content/vwcorp/info\\_center/en/news/2012/09/Dr\\_Heinz\\_Jakob\\_Neusser.html](http://www.volkswagenag.com/content/vwcorp/info_center/en/news/2012/09/Dr_Heinz_Jakob_Neusser.html).

<sup>22</sup> <http://www.spiegel.de/international/business/falsified-emissions-scandal-push-volkswagen-to-limits-a-1055897.html>.

15. According to an October 3 article from Reuters, “[a]t an internal company meeting this week at the VW headquarters in Wolfsburg, Pötsch described the situation as an ‘existence-threatening crisis for the company’, Germany’s *Welt am Sonntag* reported in a release ahead of Sunday’s publication.”<sup>23</sup>

16. As explained below, and contrary to the suggestions of some of Volkswagen’s spokespersons, the unlawful conduct here was not the action of renegade lower-level employees. It was instead the product of a concerted scheme by top executives at Volkswagen to save costs through use of the TDI technology, break into the United States diesel passenger car market by concealing from regulators and the public the inability of cars using that technology to meet federal and state emissions standards, market the TDI cars through an elaborate seven-year long campaign of false advertising and lying to state and federal officials, and thereby obtain a monopoly share of the United States Clean Diesel passenger car market.

17. The German periodical *Bild am Sonntag* revealed that Robert Bosch GmbH (“Bosch”), the supplier of some components of the emissions control system, used by Volkswagen in TDI diesel vehicles, also supplied Volkswagen with diesel software for test purposes. Bosch reportedly told VWAG in 2007 in writing that using that software in vehicles on the road would be illegal.<sup>24</sup> Similarly, *Süddeutsche Zeitung* has reported that Neusser had

---

<sup>23</sup> <http://mobile.reuters.com/article/idUSKCN0RX0GQ20151004>. Pötsch’s accession to the VWAG Board has been criticized. Hans-Christoph Hirt, a director of Hermes Equity Ownership Services, an adviser to pension fund investors in companies including Volkswagen, said the appointment created a “serious conflict of interest”: “[Pötsch] was a key VW executive for more than a decade and under German law the management board has a collective responsibility . . . The lawyers will surely demand that he recuse himself from any supervisory board meetings when management’s role is discussed.” <http://www.cnbc.com/2015/10/04/volkswagens-uniquely-awful-governance-at-fault-in-emissions-scandal.html>.

<sup>24</sup> <http://www.autonews.com/article/20150927/COPY01/309279989/bosch-warned-vw-about-illegal-software-use-in-diesel-cars-report-says>.

ignored least one Volkswagen engineer's warnings over "possibly illegal" practices in 2011.<sup>25</sup> Spiegel Online reported that groups within Volkswagen knew of potential issues as far back as 2005 or 2006.<sup>26</sup> Olaf Lies, a VWAG Board member, has stated publicly that “[t]hose people who allowed this to happen, or who made the decision to install this software--they acted criminally. They must take personal responsibility.”<sup>27</sup> (Emphases added).

18. As discussed in further detail below, Volkswagen has set aside the inadequate sum of 6.5 billion Euros (approximately \$7.2 billion) to deal with the fallout from this fraud. Numerous countries across the world are investigating the matter and here, in the United States, probes are being conducted by the United States Department of Justice (“DOJ”), a coalition of state attorneys general (“AGs”), and members of the United States House of Representatives. The EPA has ordered a recall.

## II. THE PARTIES.

### A. Plaintiff.

19. Plaintiff Dwight B. Plemmons is a resident of Asheville, North Carolina. Plemmons is an accountant and small business owner in Asheville. In 2014, Plemmons purchased a new Model Year 2014 Passat SE TDI from Harmony Motors in Asheville, North Carolina. Harmony Motors is a Volkswagen Authorized Dealer. Plaintiff purchased the Passat TDI in reliance on Volkswagen’s representations that the car was an environmentally-friendly “clean diesel” vehicle that was highly efficient, high-performance, and fun to drive. He would not have purchased the vehicle in the absence of Volkswagen’s misrepresentations about the car’s environmental impact, its fuel efficiency, and performance.

### B. Defendants.

---

<sup>25</sup> <http://www.sueddeutsche.de/politik/abgas-affaere-vw-topmanager-schwer-belastet-1.2669920>.

<sup>26</sup> <http://www.spiegel.de/wirtschaft/unternehmen/volkswagen-aufsichtsrat-lies-macht-managern-vorwuerfe-a-1055381.html>.

<sup>27</sup> <http://www.bbc.com/news/business-3439.7426>.

20. Defendant VWAG is a car corporation organized and existing under German law, with its principal place of business in Wolfsburg, Germany. VWAG is the parent company of Defendants VWoA and Audi.

21. Defendant Audi AG is a car corporation organized and existing under German law, with its principal place of business in Ingolstadt, Germany. Audi was created when VWAG merged two of its companies, Auto Union and NSU Motorenwerke AG. Audi is a 99.55%-owned subsidiary of the Volkswagen Group. Audi is now Volkswagen's luxury vehicle brand, and uses the slogan "Truth in Engineering".

22. Defendant the Volkswagen Group of America, Inc. is a corporation organized and existing under New Jersey law. Its headquarters are in Herndon, Virginia. Its sole assembly plant in the United States is located in Chattanooga, Tennessee, where the Passat model is assembled. The Volkswagen Group of America, Inc. is a wholly-owned subsidiary of VWAG. It is one of the world's largest producers of passenger cars. It sells the Beetle, Beetle Convertible, CC, Eos, e-Golf, Golf, Golf GTI, Golf SportWagen, Jetta, Passat, Tiguan, and Touareg vehicles through Volkswagen Authorized Dealers located in the United States. Volkswagen Group of America, Inc.'s operations in the United States include research and development; parts and vehicle processing; parts distribution; sales, marketing and service offices; financial service centers; and manufacturing.

23. Defendant Volkswagen of America, Inc. is owned and operated by the Volkswagen Group of America, Inc. and sells Volkswagen vehicles in the United States. Its United States headquarters are at the same address as Volkswagen Group of America, Inc. in Herndon, Virginia.

24. Defendant Audi of America, LLC is a subsidiary of Audi AG that sells Audi vehicles in the United States. Its United States headquarters are at the same address as Volkswagen Group of America, Inc. in Herndon, Virginia.

25. Volkswagen Group of America Chattanooga Operations, LLC, is a subsidiary of

Volkswagen of America, Inc., or Volkswagen Group of America, Inc., and assembles Volkswagen automobiles at Volkswagen's only assembly plant in the United States. The Chattanooga plant assembles one of the Class Vehicles, the Volkswagen Passat.

### **III. JURISDICTION AND VENUE.**

26. This Court has jurisdiction over this action pursuant to 28 U.S.C. §§ 1331, 1332(d), 1337(a) and 1367. This court also has supplemental jurisdiction pursuant to 28 U.S.C. §1367(a).

27. Venue is proper in this judicial district and in the Chattanooga Division thereof pursuant to 15 U.S.C. §§ 15 and 22, and 28 U.S.C. § 1391(b) and (c), in that at least one of the Defendants resides in this judicial district, is licensed to do business or is doing business in this judicial district.

### **IV. TRADE AND COMMERCE.**

28. Approximately 482,000 Class Vehicles have been sold or leased in the United States in a continuous and uninterrupted flow of interstate commerce and foreign commerce during the last seven years, including through and into this judicial district. The business activities of the Defendants substantially affected interstate trade and commerce in the United States and caused antitrust injury in the United States.

### **V. FACTUAL ALLEGATIONS.**

#### **A. Automobile Emissions Regulations in the United States.**

29. Congress enacted the first major Clean Air Act ("CAA") and established the EPA in 1970. The CAA, amended in 1975 and 1990, requires vehicle manufacturers to certify to the EPA that their cars and trucks will meet applicable federal emission standards.<sup>28</sup> The EPA administers a certification program to ensure that every vehicle complies with its emission standards. EPA-issued certificates of conformity are required for every vehicle sold in the

---

<sup>28</sup> <http://www2.epa.gov/laws-regulations/summary-clean-air-act>.

United States, and the EPA must approve every vehicle entering United States commerce. In these certification efforts, the EPA relies on test data submitted by automobile manufacturers, which submit the vehicles to the agency's testing procedures in their own laboratories. The EPA audits a small fraction of the new vehicles each year to ensure compliance.<sup>29</sup>

30. The Class Vehicles, like any other car sold in the United States, were required to satisfy emission standards for certain air pollutants, including NOx. 40 C.F.R. §86.1811-4; Clean Air Act §101(b)(1) – (2), 42 U.S.C. §7401(b)(1)(2).

31. Section 203(a)(3)(b) of the CAA prohibits the manufacture, selling, or installation of any device that bypasses, defeats or renders inoperative a required element of a vehicle's emissions control system. 42 U.S.C. §7522(a)(3)(b). Section 203(a)(10) of the same statute also prohibits the sale of motor vehicles or engines that are not covered by valid certificates of conformity with applicable emissions standards. 42 U.S.C. §7522(a)(1). The regulatory requirements for defeat devices are set forth in 40 C.F.R. Part 86.

32. The EPA has been rigorous in punishing automobile manufacturers or engine makers that utilize defeat devices. For example, in late 1995, it entered into a \$45 million dollar settlement with General Motors Corporation regarding the use of defeat devices on 470,000 Cadillac cars.<sup>30</sup> Likewise, in August of 1998, it fined Honda \$267 million and Ford \$7.8 million for selling vehicles equipped with defeat devices that prevented emission control systems from working properly.<sup>31</sup> Similarly, in October of that year, it and the DOJ fined seven truck and heavy duty equipment manufacturers \$83.4 million for engaging in similar conduct.<sup>32</sup>

---

<sup>29</sup> <http://www.autonews.com/article/20151004/OEM11/310059955/vw-emissions-violations-put-self-certification-under-new-scrutiny>.

<sup>30</sup> [http://www.autosafety.org/sites/default/files/imce\\_staff\\_uploads/Cadillac%20%2445%20Million%20Defeat%20Device%20Penalty%2011-31-95.pdf](http://www.autosafety.org/sites/default/files/imce_staff_uploads/Cadillac%20%2445%20Million%20Defeat%20Device%20Penalty%2011-31-95.pdf).

<sup>31</sup> [http://www.autosafety.org/sites/default/files/imce\\_staff\\_uploads/defeat.pdf](http://www.autosafety.org/sites/default/files/imce_staff_uploads/defeat.pdf)

<sup>32</sup> <http://www2.epa.gov/enforcement/cummins-engine-company-diesel-engine-clean-air-act-settlement>.

33. Volkswagen was or should have been aware of these precedents. Indeed, the company itself is a recidivist violator of the CAA. In July of 1973, the EPA referred to DOJ for legal action a claim that defeat devices were installed on 1973 Volkswagens. A copy of that referral is attached as Exhibit 3 to this Complaint. The matter was settled for \$120,000 in March of 1974.<sup>33</sup> Similarly, in June of 2005, Volkswagen entered into a consent decree with DOJ whereby it paid a \$1.1 million penalty concerning its failure to notify the EPA of emissions defects in certain vehicles manufactured at its facility in Mexico.<sup>34</sup> A copy of that decree is attached as Exhibit 4 to this Complaint.

34. CARB is a department of the California Environmental Protection Agency. It was created in 1967. California is the only state permitted to have such a regulatory agency, because it was created prior to the enactment of the CAA. CARB's mission is to "[t]o promote and protect public health, welfare and ecological resources through the effective and efficient reduction of air pollutants while recognizing and considering the effects on the economy of the state."<sup>35</sup>

35. The EPA phased in Tier 2 emissions standards from 2004 to 2009. California has similar standards in its CA LEV II standard. The Tier 2 Bin rating system applied to all passenger vehicles regardless of fuel type. Tier 2 Bin 5 standards--the ones applicable to the Class Vehicles--imposed an emission rate for NOx of 0.07 grams per mile.<sup>36</sup>

36. New cars that are sold bear stickers indicating that they are EPA-and/or CARB compliant. Below are photographs of such stickers on the inside of the hood of two of the Class

---

<sup>33</sup>[http://www.autosafety.org/sites/default/files/imce\\_staff\\_uploads/VW%20Defeat%20Device%20of%24120%2C00%20fine%203-12-74%20Pr.pdf](http://www.autosafety.org/sites/default/files/imce_staff_uploads/VW%20Defeat%20Device%20of%24120%2C00%20fine%203-12-74%20Pr.pdf).

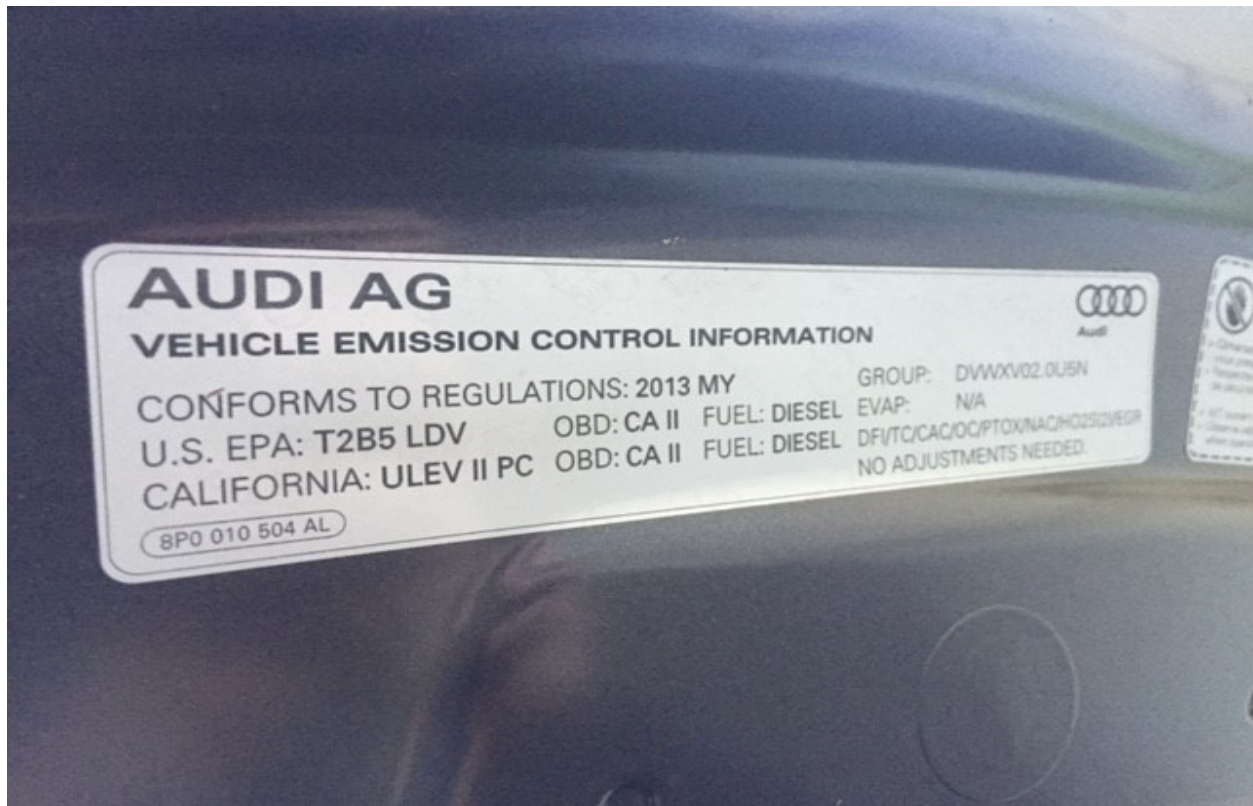
<sup>34</sup>[http://www.autosafety.org/sites/default/files/imce\\_staff\\_uploads/volkswagen-cd.pdf](http://www.autosafety.org/sites/default/files/imce_staff_uploads/volkswagen-cd.pdf).

<sup>35</sup><http://www.arb.ca.gov/html/mission.htm>.

<sup>36</sup><http://www.nctcog.org/TRANS/air/vehicles/tech/compliance/index.asp>.



Vehicles: 1) a TDI Audi A3, and 2) a 2013 TDI Volkswagen Golf.





**VOLKSWAGEN**

VEHICLE EMISSION CONTROL INFORMATION

Conforms to regulations:

2013 MY

U.S. EPA:

T2B5

LDV

OBD: CA II

Fuel: Diesel

California:

ULEV II PC

OBD: CA II

Fuel: Diesel

No adjustments needed.

DFI/TC/CAC/OC/PTOX/NAC/HO2S(2)/EGR

Group:

DVWXV02.0U5N

Evap:

N/A

03L010827L

Through these types of notice, Volkswagen was representing to customers that the Class Vehicles complied with federal and state emissions laws. This was an outright lie.

**B. Diesel Cars And Control of NOx Emissions.**

37. Diesel-powered cars, like gasoline-powered cars, must also meet the emissions standards established by the EPA and CARB. With diesel-powered engines, car manufacturers must use different--and more expensive--emission control systems than are used in gasoline-powered cars.

38. Diesel fuel has a greater energy density than gasoline. It converts heat into energy more efficiently than gasoline, sending less heat out of the tailpipe than gas-powered vehicles. Because it has greater energy density, diesel also is more efficient: diesel vehicles can get up to 30% more miles per gallon than similar gasoline-powered cars. In addition, because of their higher compression, diesel engines can generate relatively increased torque, providing strong acceleration and additional power needed for towing.

39. While diesel vehicles have certain advantages over gasoline, they also have some disadvantages. Because diesel fuel is heavier and oilier than gasoline, it can generate more pollution. While diesel engines emit lower amounts of carbon monoxide than gasoline-powered engines, they emit greater amounts of NOx.

40. Diesel fuel exhaust has been recognized by the World Health Organization to be a carcinogen for humans.<sup>37</sup>

41. Automakers have faced significant challenges in controlling NOx emissions sufficiently to meet environmental standards, particularly with smaller vehicles, and particularly in the United States, which has some of the strictest emission controls in the world. The website of greencongress.com explains the two types of approaches diesel automobile manufacturers have used to deal with NOx emissions:

---

<sup>37</sup> [http://www.iarc.fr/en/media-centre/pr/2012/pdfs/pr213\\_E.pdf](http://www.iarc.fr/en/media-centre/pr/2012/pdfs/pr213_E.pdf).

Broadly, there have been two catalytic approaches used to reduce exhaust NO<sub>x</sub>: urea-based selective catalytic reduction (SCR) and lean NO<sub>x</sub> trap (LNT) catalysts.

--The urea-SCR (urea=AdBlue) approach requires on-board storage of the reductant fluid which is introduced into the exhaust upstream of the SCR catalyst. It is then converted to ammonia which interacts with NO<sub>x</sub> on the SCR catalyst to form water and nitrogen.

--LNT technology utilizes fuel from the vehicle and advanced engine controls to enable periodic operation of the engine at rich air-to-fuel ratios to produce oxygen-depleted exhaust suitable for reducing NO<sub>x</sub> stored on the LNT catalyst surface.<sup>38</sup>

42. The article indicates that Volkswagen had planned to use both technologies as of 2007, but elected to go with the LNT approach (which it referred to as TDI). As explained below, the deciding factor was apparently cost. Because of the extra equipment (including a urea tank) and technology required to clean the NO<sub>x</sub> emissions from the diesel exhaust, SCRs can add significantly to the cost of producing the engine. They also make diesel cars heavier than they otherwise would be, thus potentially decreasing fuel efficiency, torque and power.

43. Honda, which sells diesel cars in markets other than the United States, never tried to sell them here. That is because, according to Honda's research, "[t]he market would not bear the costs of doing diesel correctly." In order to meet the stringent United States emissions standards, Honda would have had to add costly emissions controls to every diesel model, which would make them more expensive than gasoline-powered competitors. "At such a high premium, customers simply wouldn't buy them."<sup>39</sup>

### **C. Volkswagen's Decision To Use TDI Technology.**

44. Volkswagen has been selling cars in the United States since 1949, when it introduced the iconic Volkswagen Beetle. Although it was for many years the top-selling imported car in the United States, Japanese imports overtook Volkswagen and other European

---

<sup>38</sup> <http://www.greencarcongress.com/2015/09/20150921-vw2l.html>.

<sup>39</sup> <http://mashable.com/2015/09/27/vw-dieselgate/#2VosDbcL7iqT>.

imports in the 1990s.

45. The decisive factor in the decision to use TDI technology in 2007-08 was the appointment of Winterkorn as CEO of VWAG in January of 2007. Winterkorn was involved in overseeing research and development and had that responsibility at the time he resigned as CEO. In 1995, he took over as the head of Volkswagen Group Product management and a year later, he assumed the role of Member of the Board of Management for “Technical Development” at the Volkswagen brand. He assumed a similar role when he became Chairman of the Board of Management at Audi.<sup>40</sup>

46. Before Winterkorn took over as VWAG’s CEO on January in 2007, Volkswagen had partnered with Bosch and Daimler to explore the use of a diesel emissions control system called BlueTec.<sup>41</sup> BlueTec was a technology developed by the latter two companies and championed by Wolfgang Bernhard (“Bernhard”), former head of the Volkswagen brand and a former Daimler executive. BlueTec was an SCR technology; it required the use of a liquid urea tank, so that urea could be sprayed onto the emissions in order to neutralize the NOx. The urea tank not only requires space and adds weight (disadvantages that are especially acute in the market for small, fuel-efficient cars), but also requires the owner to refill the urea tank, making the diesel engine more inconvenient than a traditional gasoline-powered car. When Bernhard left the company after Winterkorn took control, the BlueTec technology was scrapped for smaller vehicles. Volkswagen only began using a form of SCR technology on a few of its smaller vehicles in 2012.

47. *Automotive News* describes the sequence of events:

---

<sup>40</sup>

See [http://www.volkswagenag.com/content/vwcorp/content/en/the\\_group/senior\\_management/winterkorn.html](http://www.volkswagenag.com/content/vwcorp/content/en/the_group/senior_management/winterkorn.html).

<sup>41</sup> For the source of this information, see [http://www.nytimes.com/2015/09/27/business/as-vw-pushed-to-be-no-1-ambitions-fueled-a-scandal.html?\\_r=0](http://www.nytimes.com/2015/09/27/business/as-vw-pushed-to-be-no-1-ambitions-fueled-a-scandal.html?_r=0).



*Bild am Sonntag* said the roots of the crisis were planted in 2005 when then-VW brand Chief Wolfgang Bernhard wanted VW to develop a new diesel engine for the U.S. market. Bernhard recruited Audi engineer Rudolf Krebs who developed a prototype that performed well in tests in South Africa in 2006, the paper said.

Bernhard and Krebs argued that the only way to make the engine meet U.S. emission standards was to employ in the engine system an AdBlue urea solution used on larger diesel models such as the Passat and Touareg, according to the report.

This would have added a cost of 300 euros (\$335 in today's U.S. dollars) per vehicle -- a sum that VW finance officials said was too much at a time when a companywide cost-cutting exercise was under way.

Bernhard left VW in January 2007 before the diesel engine went into production. Krebs was moved to another role when Martin Winterkorn became VW Group and brand CEO in 2007.

Winterkorn, Audi's former CEO, asked Audi development boss Ulrich Hackenberg and Audi engine boss Wolfgang Hatz to move to VW's Wolfsburg headquarters and continue development work on the engine, *Bild am Sonntag* said.

The engine then ended up in VW Group diesels with its engine software manipulated to fool diesel emissions tests in the U.S.<sup>42</sup>

Hatz and Hackenberg, as noted above, were two of the executives whom VWAG recently suspended.

48. Engineers at Volkswagen had been looking at an alternative to BlueTec technology, an alternative that ultimately evolved into the TDI "Common Rail" system. In 2006, Richard Dorenkamp, head of Volkswagen's diesel engine development, gave a presentation in Detroit. He described the TDI system Volkswagen engineers developed and how it could be used

---

<sup>42</sup> <http://www.autonews.com/article/20150927/COPY01/309279989/bosch-warned-vw-about-illegal-software-use-in-diesel-cars-report-says>. Winterkorn was generally very concerned about the costs associated with developing eco-friendly automotive engines. As he said at the 2014 Paris auto show, "[c]limate protection is not available free of charge. Every gram of reduction in [tailpipe] CO2 costs us 100 million euros. Every gram!" <http://blog.caranddriver.com/vws-winterkorn-to-greens-so-get-off-our-backs-already/>.

in small cars and meet increasing US demands for fewer emissions.<sup>43</sup> Volkswagen's TDI Clean Diesel pollution control technology differed from the SCR technology used by other manufacturers to control NOx emissions. The greencarcongress.com article cited earlier describes it in detail. Instead of having a urea tank, the TDI Clean Diesel cars technology used a trap to collect NOx. While saving the space, weight and cost required by the urea tank in the SCRs, Volkswagen's TDI Clean Diesel technology--when it was operational--required additional use of fuel, thus degrading both gas mileage and performance. The trap was controlled by a computer module that could save fuel by allowing more pollutants to pass through the exhaust system.

49. In June of 2007, six months after Winterkorn took over as CEO of VWAG, Volkswagen issued a report entitled "Power Train and Fuel Strategy--The Path To The Future."<sup>44</sup>

It stated:

In the first stage on the path to this independence, it will be important to utilize existing fossil fuels as efficiently as technically possible. Volkswagen is putting its stamp on this phase with vehicles such as the BlueMotion models, a universally fuel-efficient fleet of TDI engines, highly efficient and unique TSI engines, successful natural gas vehicles (EcoFuel) and a lineup of models that still leaves room for automotive dreams. Very soon these fundamental technologies will be further refined. **New powertrains, including an engine concept developed for use in the USA, under the working title "BlueTDI", are already in the prototype stage. These engines will fulfill the toughest emissions laws in the world – even the so-called "Tier2 Bin5" in California, one of the most stringent emissions standards in the world.** (Emphases added).<sup>45</sup>

---

<sup>43</sup> [http://www1.eere.energy.gov/vehiclesandfuels/pdfs/deer\\_2006/session7/2006\\_deer\\_dorenkamp.pdf](http://www1.eere.energy.gov/vehiclesandfuels/pdfs/deer_2006/session7/2006_deer_dorenkamp.pdf).

<sup>44</sup> It can be found at [http://www.volkswagenag.com/content/vwcorp/info\\_center/en/themes/2007/06/powertrain\\_and\\_fuel\\_strategy.html](http://www.volkswagenag.com/content/vwcorp/info_center/en/themes/2007/06/powertrain_and_fuel_strategy.html).

<sup>45</sup> In 2008, five VWAG engineers published a two-part article in the May and June issues of *MTZ* magazine saying they had resolved the issue of how to best control emissions and could now meet California standards through the use in part of a new on-board diagnostics system. Similarly, Achim Freitag, a testing engineer in Volkswagen's diesel development department,

50. Volkswagen had planned to introduce the Jetta TDI Clean Diesel in the United States earlier than it eventually did. In November of 2007, it was reported as follows:

A problem with the emissions system in Volkswagen's new Jetta TDI will delay the launch of the diesel sedan for about six months. The car is critical to VW's plans to get back on track in the United States.

VW spokesman Keith Price confirmed that the delay will be announced this week at the Los Angeles auto show. Price would not give specifics about the technical problem, but he said it has been fixed.

The technical changes engineers made to solve the problem mean the car must go through emissions testing and validation again, Price said.

VW dealers have been without a new diesel car to sell since last spring. Production of the new model, which will be sold in all 50 states, was scheduled to start in January. The car will be built in Puebla, Mexico.

U.S. sales originally were expected to begin in early spring, Price said. Now sales won't start until later in the summer."

"Sure, they're disappointed," Price said of dealers who have learned of the delay.

Price said there is a lot of pent-up demand from loyal VW diesel buyers for the next-generation Jetta, which has a new engine built in Germany and a new diesel fuel injection system.

"They're disappointed, but they see the point that this car has to be perfect," Price said of the dealers, adding, "They recognize the importance of this not only for their stores, but for the VW brand."

A fleet of about 40 Jetta TDIs is undergoing testing as part of the validation procedure.<sup>46</sup>

51. What apparently happened is that the TDI technology failed initially to withstand United States emissions testing. The decision was made to delay the launch of the vehicle and

---

touted the new engine in a speech given later that year. *See* <http://www.pbs.org/wgbh/nova/next/tech/volkswagen-diesel-emissions/>.

<sup>46</sup> <http://www.cleanmpg.com/forums/showthread.php?t=7254>.



activate the algorithm that functioned as a defeat device in the software management system. This is consistent with the timing of the letter from Bosch described in Paragraph 17 of this Complaint that raised the illegality of such a tactic. It is also consistent with recent revelations that appeared in the October 4 issue of *Bild am Sonntag*:

An internal review at Volkswagen AG shows the decision to install software that reduces diesel emissions in testing was made just before serial production of the company's EA 189 engine [used in many of the Class Vehicles], German tabloid Bild am Sonntag said.

Bild said the software was first installed in its diesel engines in 2008, shortly before the EA 189 was mass produced. The move was taken because there was no way at the time to reconcile meeting emission standards within the targeted cost of the engine, the tabloid said in an advance release of the article to be published Sunday. Otherwise the company would have had to abandon the introduction of the engine, development of which was begun in 2005, the newspaper said.<sup>47</sup>

52. The 2009 Model Year TDI Jetta was introduced and passed the Tier 2 Bin 5 emissions test with flying colors. A Reuters article describes its successful launch:

Volkswagen had heavily marketed what it called "clean diesel" engines starting in 2008 with the 2009-model Jetta TDI. It appeared to have found a sweet spot between high-performance and fuel-efficiency with a zippy, fun-to-drive car that topped 40 miles per gallon in highway driving. Named "Green Car of the Year" at the Los Angeles auto show in 2008, the Jetta TDI was seen as a breakthrough in a country where diesel passenger cars occupy a tiny niche compared with Europe, where they are about half of the market.

"It's not your grandfather's diesel," Krause said in a September 2008 presentation to U.S. regulators, according to a video of the remarks.

[Norbert] Krause [head of VWoA's environmental office until 2009] and other VW officials promised a diesel that would meet pollution laws in all states, including California where diesel engines had long been associated with smog and cancer-causing soot.

---

<sup>47</sup> <http://www.marketwatch.com/story/vw-began-using-emissions-software-in-2008-report-2015-10-04>.

By that point, VW and other automakers had lobbied for almost a decade for regulators to give diesel another chance. In 2000, VW and other companies with an interest in promoting diesel, including Mazda, formed the Diesel Technology Forum to lobby for increased use in the United States as a way to reduce reliance on imported oil. In 2005, an energy bill signed by President George W. Bush offered tax credits for diesel buyers. That gave the first wave of diesel Jetta buyers an income tax credit of \$1,300 each.

In 2009, after the new Jetta went on sale, VW dealers initially sold out, including in California where regulations had effectively shut the market to diesels earlier in the decade.<sup>48</sup>

53. As noted in the above article, *Green Car Journal* gave it (the new Jetta) the 2009 Green Car of the Year award and gave the TDI Audi A3 the 2010 Green Car of the Year Award.<sup>49</sup> Those awards have been rescinded in light of the present scandal.<sup>50</sup> The TDI Clean Diesels were a resounding success and VWoA sold many units.<sup>51</sup> As recently as its 2014 sustainability report, VWAG crowed about how “[t]he Volkswagen Group has a long tradition of resolute commitment to environmental protection” and how it intended to “put our creative powers to good use for the benefit of the people and the environment.”<sup>52</sup>

54. At conferences and in published papers, Volkswagen extolled the efficiency and low emissions of its Clean Diesel technology,<sup>53</sup> and commentators agreed. One stated that

---

<sup>48</sup> <http://uk.reuters.com/article/2015/09/24/uk-usa-volkswagen-deception-insight-idUKKCN0RO2J720150924>.

<sup>49</sup> [https://en.m.wikipedia.org/wiki/Green\\_Car\\_of\\_the\\_Year](https://en.m.wikipedia.org/wiki/Green_Car_of_the_Year).

<sup>50</sup> <http://www.autoblog.com/2015/09/30/vw-stripped-of-green-car-of-the-year-awards-for-jetta-a3-diesel/>.

<sup>51</sup> The chronicle of its United States sales is found here: <http://www.ibtimes.com/volkswagen-diesel-scandal-heres-how-bad-volkswagen-sales-were-company-was-caught-2114603>.

<sup>52</sup> <http://www.autoblog.com/2015/09/30/vw-stripped-of-green-car-of-the-year-awards-for-jetta-a3-diesel/>.

<sup>53</sup> See, e.g., <http://www.sae.org/events/gim/presentations/2009/norbertkrause.pdf>; [http://cleandieseldelivers.com/media/Douglas-Skorupski-VWoA\\_DTF\\_March2015.pdf](http://cleandieseldelivers.com/media/Douglas-Skorupski-VWoA_DTF_March2015.pdf).

Volkswagen was “the only company to have mastered the new emissions regulations using a compact, inexpensive treatment system. It allowed them to roll out diesel engines in one small car after another at relatively low prices.”<sup>54</sup> Volkswagen’s competitors had long wondered how Volkswagen could produce a clean diesel engine at such an affordable price. As Robert Lutz, former vice chairman of General Motors Corporation, recounted: “I kept asking our engineers: ‘What’s wrong with you guys? VW seems able to do it.’ I said, ‘Are they magicians or something?’ The engineers said they couldn’t answer that question.”<sup>55</sup> Now, they have their answer. Volkswagen cheated and lied.

55. The competitive advantages of cheating on emissions have now become clear. “Manipulating emissions results allowed Volkswagen to keep down engine costs in a ‘clean diesel’ strategy that was popular in Europe and at the heart of a drive to improve U.S. results.”<sup>56</sup> As an article in the *New York Times* put it, “[d]isabling the emissions controls brought major advantages, including much better mileage--a big selling point in Volkswagen’s push to dominate in America.”<sup>57</sup> These sales were part of the reason VWAG was able to surpass Toyota as the world’s biggest automaker in 2015, as noted above. And they were sales built upon lies.

56. This systemic attitude of winning at all costs in spite of noncompliance with national environmental regulations is part of the corporate culture of Volkswagen, as explained at length in a September 24, 2015 *New York Times* article:<sup>58</sup>

---

<sup>54</sup> <http://www.pbs.org/wgbh/nova/next/tech/volkswagen-diesel-emissions>.

<sup>55</sup> <http://www.freep.com/story/money/cars/2015/09/26/vw-cheat-emissions-diesel-engine-fallout/72612616/>.

<sup>56</sup> <http://www.reuters.com/article/2015/09/30/us-volkswagen-emissions-plan-idUSKCN0RT0OL20150930>.

<sup>57</sup> <http://mobile.nytimes.com/2015/09/27/business/as-vw-pushed-to-be-no-1-ambitions-fueled-a-scandal.html?referer>.

<sup>58</sup> [http://www.nytimes.com/2015/09/25/business/international/problems-at-volkswagen-start-in-the-boardroom.html?\\_r=1](http://www.nytimes.com/2015/09/25/business/international/problems-at-volkswagen-start-in-the-boardroom.html?_r=1).

There is a long tradition of scandal and skullduggery in the auto industry, but few schemes appear as premeditated as Volkswagen's brazen move to use sophisticated software to circumvent United States emissions standards.

That such a thing could happen at Volkswagen, Germany's largest company and the world's largest automaker by sales — 202.5 billion euros last year — has mystified consumers and regulators around the world. But given Volkswagen's history, culture and corporate structure, the real mystery may be why something like this didn't happen sooner.

"The governance of Volkswagen was a breeding ground for scandal," said Charles M. Elson, professor of finance and director of the John L. Weinberg Center for Corporate Governance at the University of Delaware. "It was an accident waiting to happen." The company, founded by the Nazis before World War II, is governed through an unusual hybrid of family control, government ownership and labor influence. Even by German standards, "Volkswagen stands apart," said Markus Roth, a professor at Philipps-University Marburg and an expert in European corporate governance. "It's been a soap opera ever since it started."

\*\*\*\*

I spoke this week to a longtime former senior Volkswagen executive, who agreed that a scandal, especially one involving emissions, was all but inevitable at Volkswagen. He cited the company's isolation, its clannish board and a deep-rooted hostility to environmental regulations among its engineers.

The former executive, who spoke on the condition of anonymity because he now works at a competing global automaker, said that Wolfsburg, where Volkswagen is based in Lower Saxony and the city with the highest per capita income in Germany, is even more remote and isolated than Detroit was in its heyday. "The entire economy is automotive," he said. "People have a completely uncritical view of cars and their impact on the environment because they all make a living from the industry."

\*\*\*\*

The Volkswagen board has been especially slow to move on environmental issues, investing less in electric and hybrid engine technology than industry leaders.

"There's an attitude among the German public that it's very unfair for the U.S. to target the auto industry over emissions," Professor Roth said. "If you have electric cars and a coal-fired plant producing the electricity, you gain nothing."

The former Volkswagen executive said Volkswagen's engineer-driven culture takes the notion even further. He said the engineers felt that the politicians were guilty of rank hypocrisy, especially in the United States, also grumbling that electric cars make no sense as long as power plants are burning fossil fuels.

"There's an attitude of moral superiority there," he said. "The engineers think they know best."

That Volkswagen is nonetheless obliged to obey applicable environmental laws, he said, is a notion likely to fall on deaf ears in Wolfsburg, especially compared to demands to be No. 1 in sales. (The motive for the software evasion is widely believed to have been to increase sales of diesel-powered cars in the United States.)

Thus, executives and engineers at Volkswagen were clearly unhappy with United States automotive emissions standards and were all too willing to sacrifice those standards (and their obligations under United States antitrust laws) in order to ensure that their company became the number one automaker in the world. The current scandal involving Volkswagen Clean Diesel TDI vehicles is a direct result of that arrogant intention to flout United States environmental laws. It is also a direct result of what has been described by one German executive as Volkswagen's "uniquely awful" corporate governance.<sup>59</sup>

#### **D. The Clean Diesel Car Market.**

57. Volkswagen's illegal conduct in this country occurred in the Clean Diesel passenger car market in the United States (the "Clean Diesel Car Market"), which can be viewed as a market of its own or as a submarket of passenger cars sold in this country. This fact was confirmed in a presentation by Douglas Skorupski ("Skorupski"), Manager of Power Train Strategy for VWoA, given to the Diesel Technology Forum ("DTF") in March of 2015, a slide from which follows:

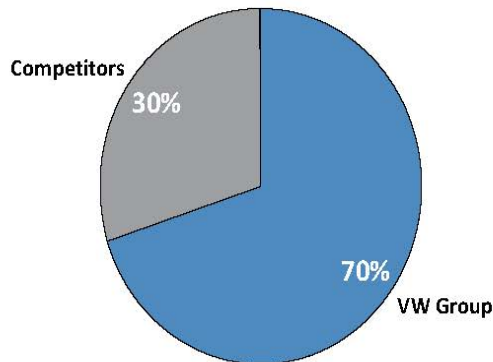
---

<sup>59</sup> <http://www.cnbc.com/2015/10/04/volkswagens-uniquely-awful-governance-at-fault-in-emissions-scandal.html>.

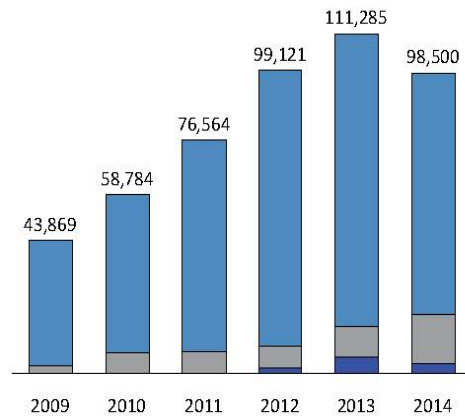
## Diesel is an important differentiator for the VW Group

TDI – Turbocharged Direct Injection Diesel

Clean Diesel volume Cars and SUVs 2014



Volkswagen Group Clean Diesel Sales Volume



➔ VW Group US Diesel market share PC ~ 70 %

➔ Strong growth since introduction

Source for competitor sales: Polk

March 2015

VWoA- Product Strategy

4



58. Thus, VWoA clearly views clean diesel cars as a distinct market and Volkswagen's TDI technology as a factor that allowed it to obtain a monopoly share of that market.<sup>60</sup> It distinguished Clean Diesel cars from gasoline/electric hybrid cars based on superior

<sup>60</sup> The presentation can be found at [http://cleandieseldelivers.com/media/Douglas-Skorupski-VWoA\\_DTF\\_March2015.pdf](http://cleandieseldelivers.com/media/Douglas-Skorupski-VWoA_DTF_March2015.pdf). Bosch has similarly identified a distinct Clean Diesel car category: <http://www.low-carbonfuels.com/pdfs/acte2011presentations/Day1/Breakout1/LightDuty/ACT2011-Breakout1-FreitagAlexPresentation150.pdf>. And the EPA has noted that "Clean diesel" refers to a three-part emissions control system that combines cleaner diesel fuel, advanced engines and effective emissions control technology.

performance: “[o]ne way Volkswagen aimed to achieve its lofty goal was by betting on diesel-powered cars — instead of hybrid-electric vehicles like the Toyota Prius--promising high mileage and low emissions without sacrificing performance.”<sup>61</sup> Similarly, a survey conducted by Strategic Vision for Volkswagen found that customers of diesel and hybrid vehicles are very different and there is “very little crossover from one to the other.”<sup>62</sup> The same article noted that Clean Diesel TDI and hybrid buyers differed demographically; the latter were “were just 51 percent male, 78 percent of them were married, 89 percent had no kids in the household, and their average age was 61”, while the former “included far more men than women[,] [f]ewer of them were married, but more of them had children in the house, and they were fully 17 years younger, with an average age of 44.” Likewise, a Volkswagen Clean Diesel IQ survey found that diesel car customers are highly aware of the benefits of clean diesel technology in contrast to hybrid and gasoline car customers. Furthermore, 94% of diesel customers will purchase clean diesel cars again while only 26% of hybrid and gasoline car customers will consider clean diesel cars for their next purchase.<sup>63</sup> All of this indicates little cross-elasticity of demand between hybrid vehicles and Clean Diesel vehicles.

59. Indeed, the major European competitors of Volkswagen in the Clean Diesel Car Market belong, along with Volkswagen, belong to an organization that is devoted to extolling the benefits of Clean Diesel cars.<sup>64</sup>

60. BloombergBusiness noted that consumers are willing to pay a substantial

---

<sup>61</sup> <http://mobile.nytimes.com/2015/09/27/business/as-vw-pushed-to-be-no-1-ambitions-fueled-a-scandal.html?referer>.

<sup>62</sup> [http://www.greencarreports.com/news/1080201\\_vw-diesel-buyers-hybrid-buyers-both-want-fuel-economy-but-beyond-that](http://www.greencarreports.com/news/1080201_vw-diesel-buyers-hybrid-buyers-both-want-fuel-economy-but-beyond-that).

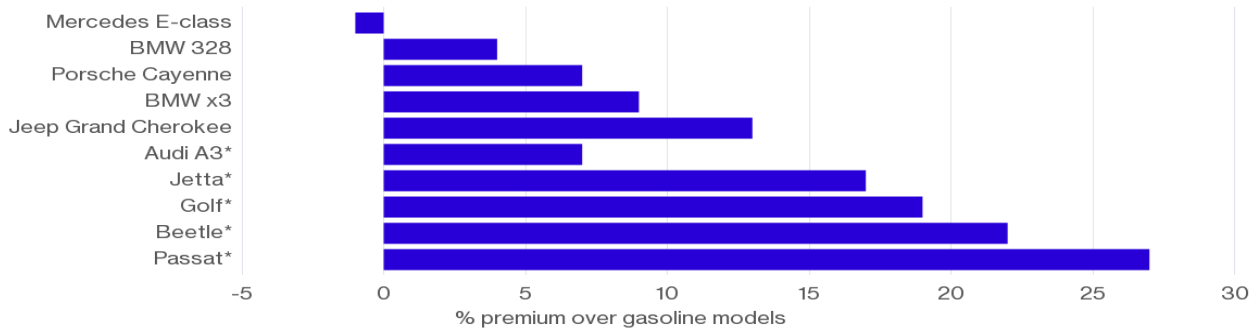
<sup>63</sup> <http://www.autosphere.ca/fleetdigest/2013/04/01/volkswagen-surveys-diesel-drivers/>. See also <http://www.cmu.edu/gdi/docs/diesel-and.pdf> (noting many key differences between diesel and hybrid car customers).

<sup>64</sup> <http://www.clearlybetterdiesel.org/index.html#cleanDiesel>.

premium for Clean Diesel vehicles over those of its competitors.<sup>65</sup>

### Diesel Power

Relative to gas models, Volkswagen's dirty diesels were sold for large premiums.



\* VW models targeted by the EPA

Source: BMW, Daimler, Fiat-Chrysler, Volkswagen

Bloomberg

61. As the BloombergBusiness article goes on to explain:

The math on diesel has never been tidy. The additional mileage is great, but unless one drives a lot, it doesn't really cover the added expense for the engine and for the fuel itself. At current gas prices, the diesel premium on the Passat—some \$5,755—would buy enough gas to drive the gas-burning model for about 88,000 miles. **For the majority of diesel drivers, the factor that probably swung the decision was the apparent environmental benefit. The green aspect was the fulcrum.** (Emphases added).

Thus, Volkswagen's false claims about its TDI technology were a driving factor in the premium prices it charged consumers for such technology. As noted above, VWAG has stated that it takes "full responsibility" for the "economic damage" caused by its illegal conduct. It should be required to do so.

<sup>65</sup> <http://www.bloomberg.com/news/articles/2015-09-23/volkswagen-s-other-diesel-ruse-premium-pricing>.



62. The price premium for Clean Diesel vehicles is also reflected in the chart below showing the price differentials between gasoline-powered models and Clean Diesel models of Volkswagen's own cars:

<b>Clean Diesel Price Premium</b>				
<b>Mode</b>	<b>Base</b>	<b>Mid-Level</b>	<b>Top-Level</b>	<b>Average</b>
VW Jetta	\$2,860.00	\$1,570.00	\$1,030.00	\$1,820.00
VW SportWagen	\$5,570.00	\$1,680.00	\$0.00	\$2,416.67
VW Golf	\$2,400.00	\$1,000.00	\$1,000.00	\$1,466.67
VW Golf	\$2,950.00	\$1,000.00	\$1,000.00	\$1,650.00
VW Beetle	\$4,635.00	\$4,920.00	\$0.00	\$3,185.00
VW Beetle	\$4,080.00	\$530.00	\$700.00	\$1,770.00
VW Passat	\$5,755.00	\$2,845.00	\$2,135.00	\$3,578.33
Audi A3	\$2,300.00	\$2,300.00	\$2,300.00	\$2,300.00
Average	\$3,818.75	\$1,980.63	\$1,020.63	\$2,273.33

#### **E. Volkswagen's False Advertising.**

63. Volkswagen, as part of its plan to increase sales and market share in the United States, increased its emphasis on diesel-powered cars and began marketing these cars heavily to the United States public beginning in 2008. It emphasized the TDI Clean Diesel cars' environment-friendly engine, excellent fuel mileage, and high-quality performance. In one advertisement (which, as of this writing, was available on Audi's website after the scandal surfaced and is attached as Exhibit 5 to the Complaint),<sup>66</sup> for example, Volkswagen claimed:

Getting more from less. Audi pioneered TDI® clean diesel engines to deliver more torque, lower fuel consumption and reduce CO2 emissions, compared to equivalent gasoline engines. The result of this revolutionary engineering delivers remarkable performance,

<sup>66</sup>

<https://web.archive.org/web/20150928180733/http://www.audiusa.com/technology/efficiency/tdi>

while achieving increased fuel economy.

64. Another advertisement by VWAG for Clean Diesel cars asserts that

This ain't your daddy's diesel. Stinky, smoky, and sluggish. These old diesel realities no longer apply. Enter TDI Clean diesel. Ultra-low-sulfur fuel, direct injection technology, and extreme efficiency. We've ushered in a new era of diesel.<sup>67</sup>

This internet advertisement is attached as Exhibit 6 to the Complaint.

65. Volkswagen's advertising relentlessly touted the supposed fuel efficiency and environmental features of its Clean Diesel TDI vehicles. In 2009, Volkswagen introduced its "Meet the Volkswagens" campaign, which promoted "fuel efficiency, green credentials, cost of ownership and safety," and compared Volkswagen's diesel passenger cars to its competitors. According to Tim Ellis, Volkswagen's marketing chief, the goal of this advertising campaign was to "grow the brand in the U.S."<sup>68</sup> This campaign, among other things, included social media links to a blog ([tdi.vw.com/tdi](http://tdi.vw.com/tdi)), which focused on Volkswagen's TDI clean diesel model.

66. Between 2011 and 2013, Volkswagen spent more than \$2.9 billion annually on advertising world-wide; many of those advertising dollars were directed at the United States public. Volkswagen issued hugely popular videos featuring the Golden Sisters, who purported to debunk the myths about polluting diesel cars.<sup>69</sup> Other videos that were highly successful included a "Truth or Dare" effort started in 2009 that was about "debunking the myths on clean diesel and fueling the passion of existing diesel owners"; a 2009 Audi video that proclaimed "diesel, no longer a dirty word"; and a Passat "being a Mom" video, all of which can be viewed on the *New York* magazine website.<sup>70</sup> Another well-known video showed German engineers of

---

<sup>67</sup> <https://web.archive.org/web/20150330110301/http://www.vw.com/features/clean-diesel/>.

<sup>68</sup> <http://abcnews.go.com/Business/story?id=7493781>.

<sup>69</sup> <http://blog.caranddriver.com/vws-hilarious-new-tdi-diesel-ads-return-excellent-viral-mileage/>.

<sup>70</sup> <http://nymag.com/daily/intelligencer/2015/09/vws-clean-diesel-ads-now-make-us-feel-dirty.html>.

TDI Clean Diesel vehicles earning their “angel’s wings.”<sup>71</sup>

67. Volkswagen also used point-of-purchase displays at the showrooms of Volkswagen Authorized Dealers such as the one depicted below:



68. As VWoA’s Mark Barnes put it, the TDI Clean Diesel cars were “fantastic power train[s]” with “very good fuel economy.” Yet “[i]t’s also good for the environment because it puts out 25% less greenhouse gas emission than what a gasoline engine would. And thanks to the uniqueness of the TDI motor, it cuts out the particulate emissions by 90% and the emissions of nitrous oxide are cut by 95%. So a very very clean running engine. Clean enough to be certified in all 50 states.”<sup>72</sup>

69. In television and print advertisements and in social media, Volkswagen strived to present its Clean Diesel TDIs as the environmentally-friendly, fuel-efficient, fun-to-drive and reasonably priced passenger car. As noted above, Volkswagen’s sham advertising campaign was a success. Unfortunately, all of these accolades were based on a lie perpetrated by Volkswagen

---

<sup>71</sup> <https://www.youtube.com/watch?v=fwkPEza9FPw>.

<sup>72</sup> <http://www.businessinsider.com/volkswagen-preps-for-a-diesel-revolution-2009-10>.

for seven years.

**F. Volkswagen's Defeat Device.**

70. As noted above, Volkswagen's defeat device is described as a "sophisticated software algorithm" that detects when the car is undergoing emissions testing. The algorithm used information about how the car was being steered, how long the engine ran and atmospheric pressure to "precisely track" the conditions that corresponded to a federal emissions test, according to the EPA. During emissions testing, the software "turns on" the car's full emissions control system in order to pass the test. Under normal driving situations, however, these emissions control systems are *turned off*, allowing the cars to spew as much as 40 times the allowable amount of NOx into the air. As an EPA spokesman noted, the defeat device was "particularly difficult for us to detect."<sup>73</sup> This ruse went undetected for seven years, although as noted in Paragraph 17 of this Complaint, Bosch and one of VWAG's own engineers complained about it to the company.

71. One technology blog has described Volkswagen's defeat device as follows:

The method by which Volkswagen diesel cars were able to thwart emissions tests and spew up to 40X the nitrogen oxide levels set by the Environmental Protection Agency was relatively simple. It was more likely no more than a single line of code used to detect when an emissions test was being performed and place the emissions system in an alternate mode — something as simple as a software "on/off" switch. Volkswagen AG CEO Martin Winterkorn, who stepping (sic) down as the result of his company's scandal, has said he had no knowledge of the emissions cheat, but software dev/test audit trails are almost certain to pinpoint who embedded the code and who authorized it. You can actually see who asked the developer to write that code," said Nikhil Kaul, a product manager at test/dev software maker SmartBear Software. "Then if you go upstream you can see who that person's boss was...and see if testing happened...and, if testing didn't happen. So you can go from

---

<sup>73</sup> <http://www.washingtonpost.com/news/wonkblog/wp/2015/09/22/anatomy-of-volkswagons-deception-the-recall-that-never-fixed-any-cars/>. A useful timeline of how the scandal came to light is provided on the website of Cars.com: <https://www.cars.com/articles/vw-diesel-crisis-timeline-of-events-1420681251993/>.

the bottom up to nail everyone."<sup>74</sup>

72. As also noted above, 482,000 vehicles were described as affected, with over 50,000 in the state of California.<sup>75</sup>

73. In 2013 and again in 2014, the International Council for Clean Transportation (“ICCT”) published studies showing serious discrepancies between laboratory and in-use emissions of certain cars, including VW TDI Diesel cars used in Europe.<sup>76</sup> A decision was made to test American Clean Diesel cars to show that they were success stories; the opposite turned out to be the case. The ICCT, in conjunction with researchers at and West Virginia University’s Center for Alternative Fuels, Engines and Emissions (“CAFEE”) conducted on-road emissions tests on three vehicles sold in the United States: a 2013 TDI Passat, a 2012 TDI Jetta, and a BMW X5 SUV. These researchers found that for the Passat and Jetta, emissions were far higher than the emissions generated in the laboratory by CARB. The Jetta exceeded United States NOx emissions standard by 15 to 35 times, and the Passat by five to 20 times. In laboratory testing by CARB, in contrast, these same vehicles complied with United States NOx emissions standards. The CAFEE report is attached as Exhibit 7 to the Complaint. ICCT brought the information to the attention of CARB and the EPA, who commenced their own investigations and contacted Volkswagen. Volkswagen chalked the discrepancies up to “various technical issues and unexpected in-use conditions”, but agreed in December of 2014 to recall approximately 500,000 vehicles in order to apply a “software patch.”<sup>77</sup>

---

<sup>74</sup> <http://developers.slashdot.org/story/15/09/24/1423225/how-did-volkswagen-cheat-emissions-tests-and-who-authorized-it>.

<sup>75</sup> <http://www.latimes.com/business/autos/la-fi-hy-california-dmv-vw-diesel-20150921-story.html>. This number excludes unregistered vehicles.

<sup>76</sup> [http://theicct.org/sites/default/files/publications/ICCT\\_LabToRoad\\_20130527.pdf](http://theicct.org/sites/default/files/publications/ICCT_LabToRoad_20130527.pdf);  
[http://www.theicct.org/sites/default/files/publications/ICCT\\_LaboratoryToRoad\\_2014\\_Report\\_English.pdf](http://www.theicct.org/sites/default/files/publications/ICCT_LaboratoryToRoad_2014_Report_English.pdf)

<sup>77</sup> <http://www.cnbc.com/2015/09/24/>.

74. After the remediation, CARB in May of 2015 tested a 2012 TDI Passat on the road and in the laboratory. It found some improvement in in-use NOx emissions, but not enough.

An article in the *Philly Voice* describes what happened next.

On July 8, CARB shared its results with VW, but there was no change in Volkswagen's position. Some officials privately questioned whether Volkswagen was deliberately violating the federal Clean Air Act by installing defeat devices -- software programmed to switch engines to a cleaner mode during official emissions testing, according to a person involved in the process.

During normal driving, the software then shuts off, enabling cars to emit as much as 40 times the legal limit of pollutants.

In early August, Oliver Schmidt, who followed [Norbert] Krause and preceded [Stuart] Johnson in VW's U.S. engineering and environmental office, attended a conference in Traverse City, Michigan and told regulators Volkswagen stood by its conclusions that the problem was technical, people involved said.<sup>78</sup>

75. Then, on August 21, there was a complete reversal. The *Philly Voice* article goes on to describe what happened:

After more than a year of stonewalling investigators, Volkswagen stunned two senior officials with the U.S. Environmental Protective Agency and California's environmental watchdog by admitting the automaker hacked its own cars to deceive U.S. regulators about how much their diesel engines pollute.

That disclosure on Aug. 21, confirmed by two people with knowledge of the exchange, shows Volkswagen buckled to pressure from environmental regulators almost a month earlier than the scandal was made public. The admission to regulators came after a year during which VW officials insisted to regulators that tests on its diesel cars showing a spike in pollution levels on the road were in error.

\*\*\*\*

At first, regulators were surprised that Volkswagen would make its confession at the conference, held in Pacific Grove, California. Minutes before Christopher Grundler, director of the EPA's transportation and air quality office, was to deliver a 9 a.m. speech to the conference, a Volkswagen representative told him about the deception. At the same meeting, representatives of the California Air Resources Board, a state agency that had been pushing VW hard, were also given a verbal notice of the deception, people with knowledge of the events said.

---

<sup>78</sup> <http://www.phillyvoice.com/year-stonewalling-volkswagen-stunned-regulators/>.

Volkswagen declined to comment on the sequence of events described to Reuters. It isn't clear which VW representative delivered the news of the deception to Grundle and the CARB. Stuart Johnson, head of VW's engineering and environmental office in the United States, was registered to attend the Aug. 21 conference, which was organized by the University of California, Davis. Johnson, who still works for VW in Auburn Hills, Michigan, did not respond immediately to a request for comment.

76. Volkswagen was faced with the threat that the EPA it would not certify any of its 2016 models for sale in the United States until the questions surrounding the emissions discrepancies were answered. Volkswagen admitted that it relied upon a “second calibration” in the vehicles that was intended to run only during certification testing. This second calibration was triggered when a highly sophisticated software algorithm determined – after measuring factors like the position of the steering wheel, the vehicle’s speed, pedal movement, and even barometric pressure – that the car was being tested. Then it would configure the engine to reduce emissions of NOx. As David Clegern of CARB explained, “[w]e met with VW on several occasions and they continued to dispute our data, so we’d return to the lab. Over time, VW had no other explanations left, and it was our lab staff who actually got VW to admit that there was, in fact, a defeat device.”<sup>79</sup> As another CARB spokesperson told the *Washington Post*, “[t]hey basically ran out of excuses.”<sup>80</sup>

77. The scandal surfaced on September 18, 2015, when CARB and the EPA announced that VWAG, Audi and VWoA had illegally installed emissions testing “defeat devices” in the aforementioned vehicles. See Appendices 1 and 2. The EPA found violations of 42 U.S.C. §§7522(a), 7522(a)(1) and 7522(a)(3)(B), as well as 40 C.F.R. §§86.1854-12(a)(3)(ii) and 86.1854-12(a). The EPA identified the following affected vehicles:

---

<sup>79</sup> <http://www.foxnews.com/leisure/2015/09/22/for-7-years-vw-software-thwarted-pollution-regulations/>.

<sup>80</sup> <http://www.washingtonpost.com/news/wonkblog/wp/2015/09/22/anatomy-of-volkswagonsdeception-the-recall-that-never-fixed-any-cars/>.



<b>Model Year</b>	<b>EPA Test Group</b>	<b>Make and Model(s)</b>
2009	9VWXV02.035N	VW Jetta, VW Jetta Sportwagen
2009	9VWXV02.0U5N	VW Jetta, VW Jetta Sportwagen
2010	AVWXV02.0U5N	VW Golf, VW Jetta, VW Jetta Sportwagen, Audi A3
2011	BVWXV02.0U5N	VW Golf, VW Jetta, VW Jetta Sportwagen, Audi A3
2012	CVWXV02.0U5N	VW Beetle, VW Beetle Convertible, VW Golf, VW Jetta, VW Jetta Sportwagen, Audi A3
2012	CVWXV02.0U4S	VW Passat
2013	DVWXV02.0U5N	VW Beetle, VW Beetle Convertible, VW Golf, VW Jetta, VW Jetta Sportwagen, Audi A3
2013	DVWXV02.0U4S	VW Passat
2014	EVWXV02.0U5N	VW Beetle, VW Beetle Convertible, VW Golf, VW Jetta, VW Jetta Sportwagen, Audi A3
2014	EVWXV02.0U4S	VW Passat
2015	FVGAV02.0VAL	VW Beetle, VW Beetle Convertible, VW Golf, VW Golf Sportwagen, VW Jetta, VW Passat, Audi A3

78. As noted above, Horn of VWoA admitted that Volkswagen was dishonest with both customers and regulators and Huber of VWAG called the matter a “moral and political disaster.”



79. Volkswagen has ordered its dealers to cease selling the Class Vehicles<sup>81</sup> and has set aside a minimum of 6.5 billion Euros (\$7.2 billion) to deal with the fallout from this catastrophe, which it now concedes involved 11 million vehicles worldwide. An internal memorandum issued on September 22 details this:

Wolfsburg, 22 September 2015

### **Volkswagen AG has issued the following information:**

**Volkswagen is working at full speed to clarify irregularities concerning a particular software used in diesel engines. New vehicles from the Volkswagen Group with EU 6 diesel engines currently available in the European Union comply with legal requirements and environmental standards. The software in question does not affect handling, consumption or emissions. This gives clarity to customers and dealers.**

Further internal investigations conducted to date have established that the relevant engine management software is also installed in other Volkswagen Group vehicles with diesel engines. For the majority of these engines the software does not have any effect.

Discrepancies relate to vehicles with Type EA 189 engines, involving some eleven million vehicles worldwide. A noticeable deviation between bench test results and actual road use was established solely for this type of engine. Volkswagen is working intensely to eliminate these deviations through technical measures. The company is therefore in contact with the relevant authorities and the German Federal Motor Transport Authority (KBA – Kraftfahrtbundesamt).

To cover the necessary service measures and other efforts to win back the trust of our customers, Volkswagen plans to set aside a provision of some 6.5 billion EUR recognized in the profit and loss statement in the third quarter of the current fiscal year. Due to the ongoing investigations the amounts estimated may be subject to revaluation.

Earnings targets for the Group for 2015 will be adjusted accordingly.

Volkswagen does not tolerate any kind of violation of laws whatsoever. It is and remains the top priority of the Board of Management to win back lost trust and to avert damage to our customers. The Group will inform the public on the further progress of the investigations constantly and transparently.

80. Volkswagen has indicated it will initiate a recall and remediation of the Class Vehicles, but there is no “fix” that can be achieved that would not result in lesser mileage per gallon or degraded performance, two of the key attributes on which TDI Clean Diesel cars were sold. Autoweek reported about the problems with potential “fixes” by Volkswagen:

---

<sup>81</sup> See <http://pics3.tdiclub.com/data/3209/stop-sale-note3.pdf>.

“Experts Reuters spoke to indicate that two potential fixes could be needed for the two types of emissions control systems featured on 482,000 cars in the U.S., complicating the recall and refit process. Some experts opined that just a software solution could make the affected vehicles compliant with EPA regulations, reducing the performance characteristics of the engines in the process, while others suspect that a hardware solution may be needed for older vehicles without the urea injection system.

A couple of experts warned that the potential solution could involve significantly increased consumption of urea, necessitating fill-ups at more frequent intervals such as every 5,000 miles, in addition to reducing the performance of the engines.<sup>82</sup>”

The same point was made by the West Virginia AG in a complaint filed on October 2 against Volkswagen for civil penalties. It is attached as Exhibit 8. In that complaint, the West Virginia AG notes that “Volkswagen will not be able to comply with the EPA [recall] order to make the Affected Vehicles comply with emissions standards without substantially degrading their performance and fuel efficiency to a level below that advertised by Volkswagen, and below that experienced by consumers prior to, or when they purchased their vehicles.” Thus, there is no valid “cure” for Volkswagen’s conduct.

81. Nor can any recall cure the tarnished reputation of Volkswagen’s TDI Clean Diesel vehicles and the substantial diminution of their resale value. The Kelley Bluebook has reported that prices for used Volkswagen diesel cars have declined by 21% in the last few weeks, reflecting the aftermath of Dieselgate.<sup>83</sup> Thus, customers not only overpaid when they bought the Class Vehicles, but also have suffered a significant diminution of the resale value of their vehicles. Indeed, a survey of 460 fleet buyers in the United Kingdom revealed that 49% of them were reconsidering their contracts with Volkswagen in the aftermath of the Dieselgate revelations.<sup>84</sup>

---

<sup>82</sup> <http://autoweek.com/article/car-news/vw-diesel-emissions-fix-may-require-2-solutions>.

<sup>83</sup> <http://www.latimes.com/business/autos/la-fi-hy-auto-sales-20151001-story.html>.

<sup>84</sup> <http://www.dailymail.co.uk/money/news/article-3258793/VW-scandal-deepens-revealed-half-company-car-buyers-ditch-embattled-firm.html>.

82. As noted above, the Executive Committee of the Board of Volkswagen AG that accepted Winterkorn's retirement, said that it "recognizes the economic damage caused" as well as the "loss of trust" among customers. No recall and supposed remediation can correct that.

83. A survey of vehicle owners conducted by AutoPacific<sup>85</sup> further reveals consumer disgust with Volkswagen. Only one in four have a positive opinion of Volkswagen, compared to three in four before the scandal. The corresponding figures for Audi were 29%, as opposed to 69%. Sixty-four percent of the survey respondents say they do not trust Volkswagen.

84. The illegal conduct by Volkswagen has not just resulted in economic damage and loss of consumer trust. It has caused **the death of dozens of people in the United States over the last seven years and degraded the health of many more**. On October 3, Associated Press ("AP") laid out the facts.<sup>86</sup> AP calculated exhaust pollution year by year, starting with the ten to 40 times emissions level estimate by the EPA and then factored in mileage and car number totals from the Kelley Blue Book. It came up with a range of NOx pollution caused by the Class Vehicles and then took it to scientists who modeled mortality rates, which were confirmed by a dozen experts in emissions, risk and public health, none of whom were environmental advocates or representatives of automobile manufacturers. The results are depicted in the chart that follows.

---

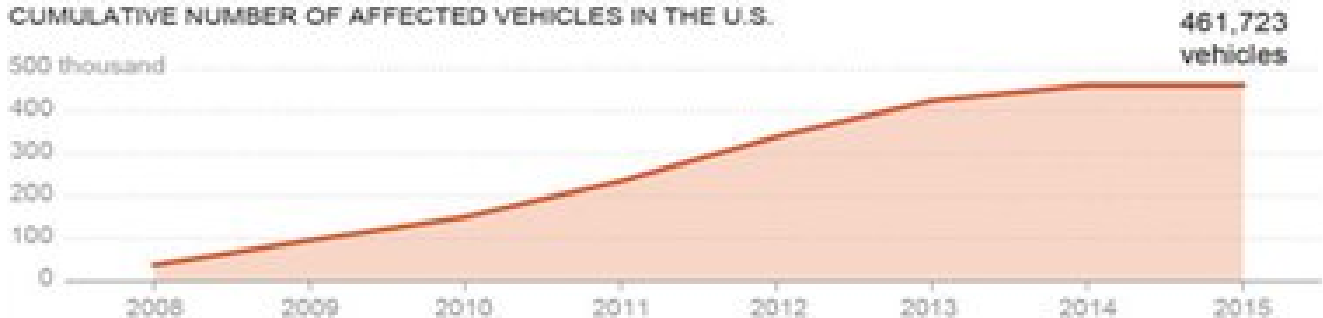
<sup>85</sup> <http://www.autopacific.com/news-app/story.248/title.volkswagen-s-reputation-takes-big-hit-with-vehicle-owners-autopacific-predicts-tough-road-ahead>.

<sup>86</sup> <http://bigstory.ap.org/article/a6925f0af82e44aa1a1ed4b55d030f6/ap-analysis-dozens-deaths-likely-vw-pollution-dodge>.

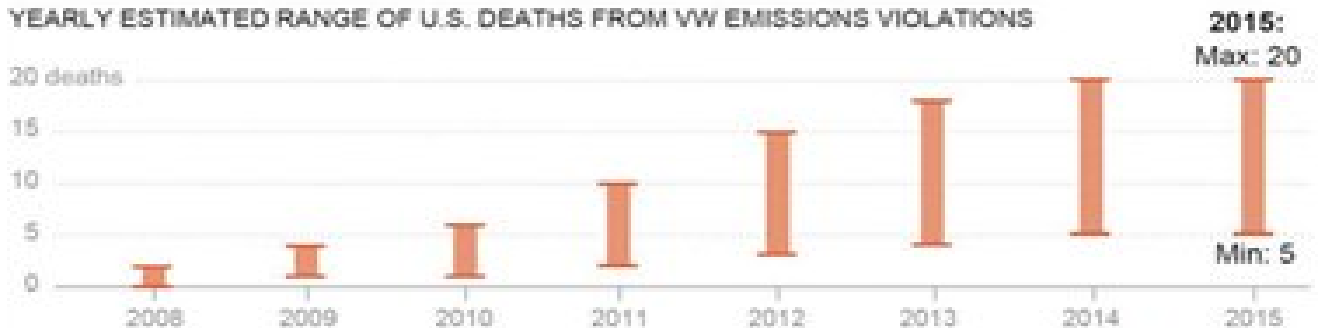
# Calculating human toll of VW emissions problems

U.S. pollution resulting from Volkswagen's dodging of emissions tests is enough to have caused dozens of deaths since 2008. An AP analysis calculated upper and lower limits of pollution using the number of affected vehicles each year and average mileage. Scientists used that data in epidemiological computer models to estimate a range of deaths.

CUMULATIVE NUMBER OF AFFECTED VEHICLES IN THE U.S.

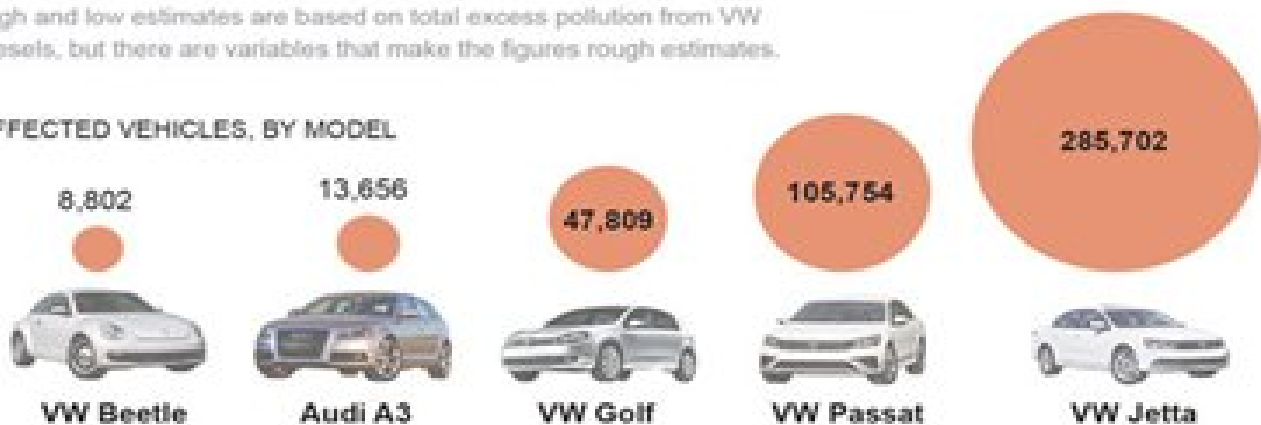


YEARLY ESTIMATED RANGE OF U.S. DEATHS FROM VW EMISSIONS VIOLATIONS



High and low estimates are based on total excess pollution from VW diesels, but there are variables that make the figures rough estimates.

AFFECTED VEHICLES, BY MODEL



NOTE: The total of 47,809 for VW Golf includes 3,530 VW Golf Sportswagen vehicles. The total figure of 461,723 is derived from Kelley Blue Book vehicle registration data. The Environmental Protection Agency estimates the total number of affected vehicles in the U.S. to be about 482,000.

SOURCES: AP analysis of data from the U.S. Environmental Protection Agency and Kelley Blue Book; Professor Peter Adams, Carnegie Mellon; Volkswagen; Audi

AP

85. As the AP article notes, the Class Vehicles spewed enough NO<sub>x</sub> over the course of seven years to significantly degrade the environment in urban areas. Eric Schneiderman, the New York AG has said that “[t]he stakes could not be higher for the health and safety of our communities who, if Volkswagen’s own admissions are true, have for years been breathing air containing excess pollution from their vehicles.”<sup>87</sup> Harris County Texas (where the City of Houston is located) has already sued Volkswagen for \$100 million in harm to air quality.<sup>88</sup>

86. As noted in the *Minneapolis Star-Tribune* in a follow-up piece on the AP story:

Computer software allowed VW diesel cars to spew between 10 to 40 times more nitrogen oxides (NO<sub>x</sub>) than allowed by regulation, making this "clearly a concern for air quality and public health," said Janet McCabe, acting air quality chief for the U.S. Environmental Protection Agency.

Nitrogen oxides mostly form smog — that murky, dirty air that makes it hard to see and for some people to breathe — but also amplify a deadlier, larger problem: tiny particles of soot. Numerous medical studies show those tiny particles cause about 50,000 deaths a year in the United States, mostly from heart problems.

Nitrogen oxides can travel hundreds of miles, so pollution spewed in Pittsburgh can be felt on the East Coast, [Carnegie Mellon environmental engineer Professor Peter] Adams said.

Experts calculate how much pollution costs society by looking at the value of lost lives. In this case, Adams and other said the lost lives — valued at \$8.6 million apiece — overwhelm other costs such as lost work days or hospital costs. The overall annual cost of the extra pollutants from the VW diesels ranged from \$40 million to \$170 million, environmental engineering professors calculated. "Even the small increase in NO<sub>x</sub> from VW diesel emissions is likely to have worsened pollution along the roadways where they have traveled, and affected the lives of hundreds of thousands of people," said Dan Greenbaum, president of the Health Effects Institute in Boston.

---

<sup>87</sup> [http://mobile.nytimes.com/2015/10/03/business/us-states-jumping-into-investigation-of-vw-emissions-deception.html?\\_r=0&referrer=https://www.google.com/](http://mobile.nytimes.com/2015/10/03/business/us-states-jumping-into-investigation-of-vw-emissions-deception.html?_r=0&referrer=https://www.google.com/).

<sup>88</sup> <http://www.wsj.com/articles/u-s-justice-department-conducts-criminal-probe-of-volkswagen-sources-say-1442869059>.

"To say millions of people are breathing poor air as the result of that is not off the mark," said Greenbaum, who runs the institute that is funded by both the EPA and the auto industry to serve as an independent arbiter of the science.<sup>89</sup>

87. The revelation of the scandal has led to numerous consequences in the United States. The DOJ is conducting a criminal probe of Volkswagen.<sup>90</sup> AGs in 30 states have initiated their own investigation.<sup>91</sup> A Texas judge has issued a temporary restraining order preventing the Class Vehicles from being sold within the state. *See* Exhibit 9 to the Complaint. The Subcommittee of Oversight & Investigations of the Energy & Commerce Committee of the United States House of Representatives has initiated an investigation and sent letters to Volkswagen and the EPA.<sup>92</sup> Horn has said he will testify before the committee on October 8.<sup>93</sup> Fred Upton, the Chairman of the full Committee, has stated that "[t]he very notion of a carmaker intentionally violating our environmental laws is beyond belief....[R]eports of Volkswagen selling cars with devices aimed at skirting the law cannot, and will not be tolerated. Attempting to deceive regulators and customers is a double whammy of betrayal."<sup>94</sup> Nearly 200 private lawsuits have been filed, many of them class actions. Among those class actions, most involve class claims for individual statewide classes, as opposed to federal claims for nationwide classes.

88. Outside the United States, several countries are investigating Volkswagen's

---

<sup>89</sup> <http://www.startribune.com/ap-analysis-dozens-of-deaths-likely-from-vw-pollution-dodge/330512421/>.

<sup>90</sup> <http://www.wsj.com/articles/u-s-justice-department-conducts-criminal-probe-of-volkswagen-sources-say-1442869059>.

<sup>91</sup> <http://www.law360.com/articles/707229/volkswagen-faces-multistate-probe-over-emissions-fraud>.

<sup>92</sup> <http://energycommerce.house.gov/press-release/committee-leaders-request-documents-volkswagen-investigation-continues>.

<sup>93</sup> <http://www.detroitnews.com/story/business/autos/foreign/2015/10/01/vw-congress/73159518/>.

<sup>94</sup> <http://energycommerce.house.gov/press-release/suboversight-schedules-volkswagen-hearing-october-8>.

conduct.<sup>95</sup> Switzerland has banned the sale within its borders of certain Volkswagen TDI Diesel cars sold in Europe.<sup>96</sup> Prosecutors in Paris have launched an investigation for suspected “aggravated” deception of affected vehicles sold in France; French Environment Minister Segolene Royal called Volkswagen’s conduct “a form of theft from the taxpayer and the state.”<sup>97</sup> The Italian antitrust authority has also commenced an investigation, saying “Volkswagen’s claims about emissions and certifications in advertising campaigns and information brochures distributed by dealers might have induced consumers to make an error in their choice.”<sup>98</sup>

89. As noted above, Volkswagen has set aside \$7.2 billion to deal with the costs of the scandal. That will not be nearly enough. James E. Tierney, a former AG in Maine, has been quoted as saying that the costs to Volkswagen might be “‘incalculable,’ with each false advertisement to consumers, for example, carrying a potential penalty. ‘This product was designed to operate illegally, and that is very serious.’”<sup>99</sup>

90. Nonetheless, some attempts at calculation have been made. On October 2, Credit Suisse disseminated an analysis showing Volkswagen’s anticipated costs in a “bull” scenario (where events turned out favorably to it), a “base” scenario, and a “bear” scenario (where events turned out unfavorably).<sup>100</sup> The “bull” scenario was \$25.6 billion in costs, while the “bear”

---

<sup>95</sup> [https://en.m.wikipedia.org/wiki/Volkswagen\\_emissions\\_violations](https://en.m.wikipedia.org/wiki/Volkswagen_emissions_violations).

<sup>96</sup> <http://www.theguardian.com/business/2015/sep/26/volkswagen-emissions-scandal-switzerland-bans-sale-of-some-models>.

<sup>97</sup> <http://www.dailymail.co.uk/news/article-3257720/Paris-prosecutors-latest-launch-investigation-potential-fraud-Volkswagen-emissions-cheating-scam.html>.

<sup>98</sup> [http://www.morningstar.com/news/dow-jones/TDJNDN\\_201510023140/italy-antitrust-body-opens-case-against-volkswagen-over-emissions.html](http://www.morningstar.com/news/dow-jones/TDJNDN_201510023140/italy-antitrust-body-opens-case-against-volkswagen-over-emissions.html).

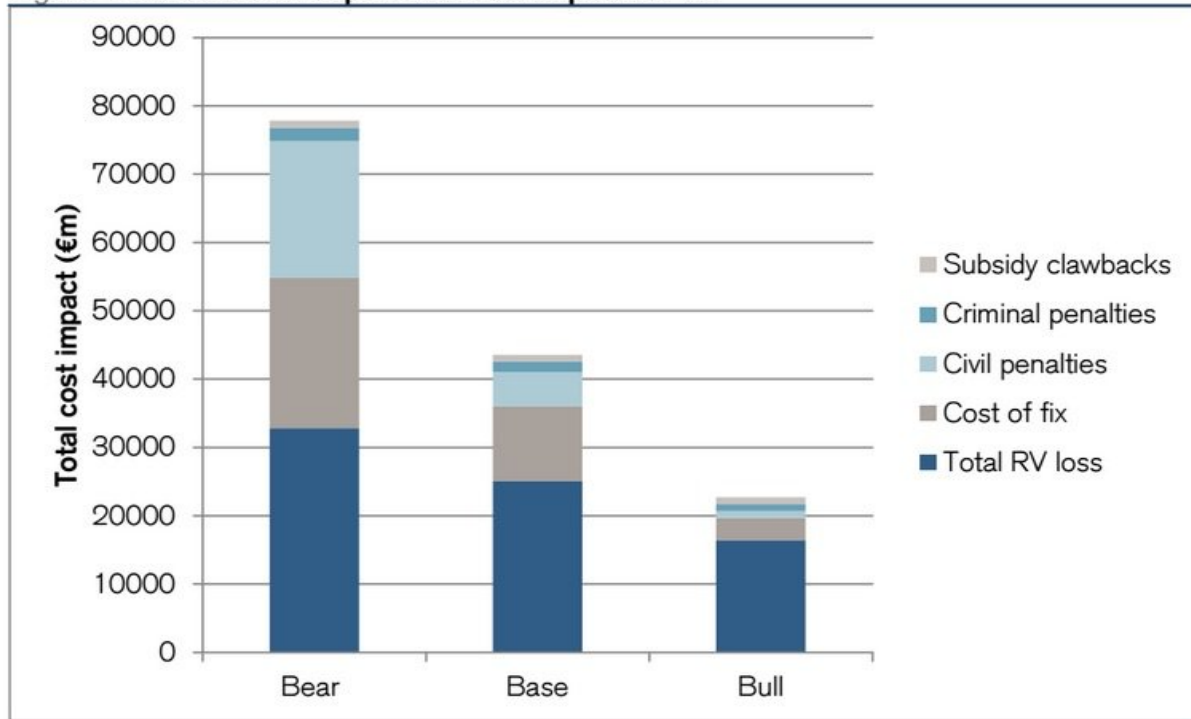
<sup>99</sup> [http://mobile.nytimes.com/2015/10/03/business/us-states-jumping-into-investigation-of-vw-emissions-deception.html?\\_r=0&referrer=https://www.google.com/](http://mobile.nytimes.com/2015/10/03/business/us-states-jumping-into-investigation-of-vw-emissions-deception.html?_r=0&referrer=https://www.google.com/).

<sup>100</sup> <http://www.businessinsider.com/credit-suisse-volkswagen-shares-could-fall-another-20-2015-10?r=UK&IR=T>.



scenario was \$87.1 billion. The analysis is summarized in the following chart:

Figure 17: **Breakdown of potential cost impact for VW**



Source: Credit Suisse estimates

As can be seen, costs associated with criminal and civil penalties make up a significant portion of the differing amounts. Credit Suisse also predicts that Volkswagen's stock may decline another 20%.



## **VI. CLASS ACTION ALLEGATIONS.**

91. Plaintiff brings this action both on behalf of himself, and as a class action pursuant to Federal Rules of Civil Procedure 23(a) and (b)(3), on behalf of the following class (the “Class”).

All persons and entities who purchased or leased a Class Vehicle from a Volkswagen Authorized Dealer in the United States. Excluded from the Class are Defendants, their parent companies, subsidiaries and affiliates, any co-conspirators, all governmental entities, and any judges or justices assigned to hear any aspect of this action.

The Class includes a subclass of persons located in North Carolina. These will be referred to herein as the “North Carolina Subclass”, however, references herein to the “Class” include the “North Carolina Subclass”.

92. Plaintiff does not know the exact number of Class and Subclass members but believe, based on published reports, that there are more than 482,000 Class members, geographically dispersed throughout the United States such that joinder of all class members is impracticable. The identity of Class members can be determined from the internal records of Volkswagen.

93. Plaintiff’s claims are typical of the claims of the Class and Subclass in that Plaintiff purchased or leased a Class Vehicle from a Volkswagen Authorized Dealer in the United States. All Class and Subclass members were damaged by the same wrongful conduct of Defendants and their co-conspirators as alleged herein, and the relief sought is common to the Class and Subclass.

94. Common questions of law and fact predominate over any individual questions. These questions include, but are not limited to:

- Whether Volkswagen unlawfully acquired a monopoly in the Clean Diesel Car Market;
- Whether the Clean Diesel Car Market is a properly defined product market for purposes of Section 2 of the Sherman Act;

- Whether Volkswagen's acquisition and/or maintenance of a monopoly in the Clean Diesel Car Market had the effect of increasing to supracompetitive levels the retail prices of Class Vehicles;
- Whether Volkswagen violated the CAA and applicable regulations;
- Whether Volkswagen violated California Pollution Control laws and applicable regulations;
- Whether Volkswagen's conduct violated RICO;
- Whether the Volkswagen RICO Enterprise as defined herein is a cognizable RICO enterprise;
- Whether Volkswagen committed federal mail and wire fraud, thus establishing predicate acts under RICO;
- Whether Volkswagen engaged in a pattern of racketeering activity;
- Whether Plaintiff and Class members were injured in their business or property, and, if so, what is the appropriate measure of their damages;
- Whether Volkswagen misrepresented the environmental impact of its Class Vehicles;
- Whether Volkswagen misrepresented the Class Vehicles' emission standards compliance, fuel efficiency or performance;
- Whether Volkswagen violated the Magnuson-Moss Warranty Act;
- Whether Volkswagen violated North Carolina's Unfair and Deceptive Trade Practices Act
- Whether Volkswagen committed fraudulent concealment;
- Whether Volkswagen was unjustly enriched;
- Whether Plaintiff and the other members of the Class and Subclass were injured by Defendants' conduct, and, if so, the appropriate classwide measure of damages for Class members; and

- The scope of any injunctive and other equitable relief to which Plaintiff and the other members of the Class and Subclass are entitled.

95. These and other questions of law and fact are common to the Class and Subclass predominates over any questions affecting only individual Class members.

96. Plaintiff will fairly and adequately represent the interests of the Class in that he has no conflict with any other members of the Class and Subclass. Furthermore, Plaintiff has retained competent counsel experienced in antitrust, class action, and other complex litigation.

97. Defendants have acted on grounds generally applicable to the Class, thereby making final injunctive relief appropriate with respect to the Class and Subclass as a whole.

98. This class action is superior to the alternatives, if any, for the fair and efficient adjudication of this controversy. Prosecution as a class action will eliminate the possibility of repetitive litigation. There will be no material difficulty in the management of this action as a class action. The prosecution of separate actions by individual Class and Subclass members would create the risk of inconsistent or varying adjudications, establishing incompatible standards of conduct for Defendants.

## **CLAIMS FOR RELIEF**

### **FIRST CLAIM**

#### **Violation of the Section 2 of the Sherman Antitrust Act (Monopolization) (15 U.S.C. § 2).**

99. Plaintiff incorporates by reference each preceding and succeeding paragraph.

100. The relevant product market for purposes of Plaintiff's claims under Section 2 of the Sherman Act is the Clean Diesel Car Market, which, as noted above, consists of: (a) the product market of Clean Diesel passenger cars and (b) a geographic market consisting of the United States. All diesel fuel sold in the United States during the relevant period is "clean diesel fuel", with 97% less sulfur than the diesel sold in the 1970s. Similarly, all diesel cars sold in the United States since 2007 (which have had to meet the same emission standards as gasoline engines) have advanced engines and emissions control technology that make the diesel engines cleaner than in the past, are able to take advantage of the clean diesel fuel, and use exhaust systems that further reduce diesel engine emissions.

101. As Volkswagen's own market research and market research by others described above in this Complaint have demonstrated, clean diesel cars are not in the same relevant market as gasoline or even hybrid cars of similar size and class. Diesel engines require the use of a different and more expensive fuel than gasoline-powered engines, can travel much greater distances on a single tank of fuel, and are more expensive. Unlike hybrid or electric vehicles, diesel-powered vehicles do not have to be plugged in, can travel greater distances without refueling or plugging in, and --particularly with more recent compression technology like the Volkswagen's TDI engines -- have greater torque, acceleration, and towing power. In addition, the demographics of the clean diesel buyers are distinct from those of hybrid buyers in that the former are more likely to be male, younger, and less likely to have children than the latter.

102. At all relevant times, Volkswagen has been a competitor in the Clean Diesel Car Market, and has maintained significant market share. As the chart presented by Skorupski of VWoA depicted above demonstrates (see Paragraph 56), Volkswagen's share of the Clean Diesel

Car Market has been 70% or more during the entire relevant period.

103. Barriers to entry in the Clean Diesel Car Market are high. In addition to the barriers to entry and expansion posed by Volkswagen's anticompetitive conduct, as described in this Complaint, other barriers to entry include: high research and development costs, high costs of making diesel engines that are EPA- and CARB-compliant, and high capital costs.

104. Consumers, experts and commentators in the automotive industry, and the automobile manufacturers themselves, including Volkswagen, all recognize the Clean Diesel Car market as distinct from markets including gasoline, hybrid, or electric cars.

105. Volkswagen has monopoly power in the Clean Diesel Car Market.

106. Through the anticompetitive use of the defeat device and its deception of the EPA, CARB, Plaintiff, and the Class, Volkswagen has willfully acquired and/or maintained its monopoly of the Clean Diesel Car Market. This conduct has harmed competition in that market, and has caused injury to every person that purchased or leased a Class Vehicle. The purchase or lease price was higher than it would have been in a competitive market; the supply and selection of products was lower than it would have been in a competitive market; innovation has been stifled; and the number and effectiveness of competitors in that Market has been diminished by unlawful means.

107. As a result of this violation of law, the price of Class Vehicles was higher than it otherwise would have been.

108. There is no legitimate business justification for the conduct described in this Complaint which has facilitated Volkswagen's monopolization of the Clean Diesel Car Market.

109. The anticompetitive conduct described in this Complaint has caused injury to the business or property of Plaintiff and members of the Class and is in violation of section two the Sherman Act (15 U.S.C. § 2).

110. Plaintiff is a buyer of Class Vehicles in the Clean Diesel Car Market; he is thus a direct participant in the monopolized market. Volkswagen issues warranties directly to Class

Vehicle buyers. The Volkswagen Authorized Dealers<sup>101</sup> obtain Class Vehicles from Volkswagen (through its American subsidiaries) that are certified to be EPA- and/or CARB-compliant and, as noted above, have visible stickers to that effect. The emissions testing that is used to justify those certifications is undertaken by VWoA in the United States.<sup>102</sup> Class Vehicles so labeled are displayed on the showroom floors of Volkswagen Authorized Dealers. The false certifications by Volkswagen were one of the critical elements of its unlawful scheme of monopolization. The Volkswagen Authorized Dealers were agents of Volkswagen for the purpose of disseminating these false certifications and representations by Volkswagen to customers in order to induce them to purchase TDI Clean Diesel vehicles. In addition, Volkswagen (through its American subsidiaries) sets the Manufacturer's Suggested Retail Price ("MSRP") for Class Vehicles, which includes the premium for the TDI Clean Diesel technology described herein. While Volkswagen Authorized Dealers could charge customers a price less than the MSRP (such as when Volkswagen provides rebates or short-term retail promotions), that lesser price is nonetheless keyed off the MSRP and still contains a portion of the premium for the sham TDI Clean Diesel technology. This case involves retail prices for Class Vehicles paid by consumers, like the Plaintiff, who are participants in the relevant market and who pay more for those vehicles because of Volkswagen's illegal monopolistic practices.

## **SECOND CLAIM**

### **Violation of Section 2 of the Sherman Antitrust Act (Attempted Monopolization) (15 U.S.C. § 2).**

---

<sup>101</sup> In a recent recall notice unrelated to Dieselgate, Volkswagen has indicated that it has 652 authorized dealers in the United States.  
[https://media.vw.com/doc/1456/volkswagen\\_issues\\_voluntary\\_recall-tiguan\\_label\\_recall\\_release-17883691505565f01ccc4bb.pdf](https://media.vw.com/doc/1456/volkswagen_issues_voluntary_recall-tiguan_label_recall_release-17883691505565f01ccc4bb.pdf). Their names and addresses can be identified through Volkswagen's records. The Volkswagen Authorized Dealers have a 12-person National Dealer Advisory Council that interacts closely with VWoA on such issues as company management.

<sup>102</sup> <http://www.manufacturing.net/news/2015/10/vw-pollution-test-site-under-scrutiny-amid-emissions-cheating-scandal>.

111. Plaintiff incorporates by reference each preceding and succeeding paragraph.

112. Volkswagen has acted with specific intent to monopolize the Clean Diesel Car Market as described above through the anticompetitive use of the defeat device and its deception of the EPA, CARB, Plaintiff, and the Class.

113. There was and is a dangerous probability that Volkswagen will succeed in its attempt to monopolize the Clean Diesel Car Market because Volkswagen controls a large percentage of that market and has the ability to and actually did exclude competitors through the anticompetitive conduct described in this Complaint.

114. Volkswagen's conduct has harmed competition in the Clean Diesel Car Market, making the supply and selection of available Clean Diesel Cars lower than it would be in a competitive market.

115. There is no legitimate business justification for the conduct described in this Complaint which has facilitated Volkswagen's monopolization of the Clean Diesel Car Market.

116. The anticompetitive conduct described in this Complaint has caused injury to the business or property of Plaintiff and members of the Class and is in violation of the Sherman Act (15 U.S.C. § 2).

### **THIRD CLAIM**

#### **Violation of the Racketeer Influenced and Corrupt Organizations Act ("RICO") (18 U.S.C. §§ 1962(c), 1964).**

117. Plaintiff incorporates by reference each preceding and succeeding paragraph.

118. Plaintiff is a "person" within the meaning of 18 U.S.C. § 1964(c), and has sustained injury to his business or property as a result of Volkswagen's conduct described in this Complaint.

119. Each Defendant is a "person" within the meaning of 18 U.S.C. § 1961(3).

120. Defendants violated 18 U.S.C. § 1962(c) by participating in or conducting the affairs of the Volkswagen RICO Enterprise through a pattern of racketeering activity.

121. For the past seven years, Volkswagen has engaged in a deliberate, pre-meditated

and continuous effort to deceive Plaintiff, members of the Class, and federal and state regulators into believing that the Class Vehicles are environmentally-friendly, fuel-efficient, and EPA- and CARB-compliant. Unknown to Plaintiff, Class members and federal and state regulators, Volkswagen installed into the Class Vehicles pollution control defeat devices that turned off the pollution controls when the cars were in normal operating mode.

122. Plaintiff and Class members had no way of knowing that these devices were disabled by Volkswagen. Pursuant to the CAA, Volkswagen was required to equip its cars with on-board diagnostic systems that trigger a dashboard “check engine” light that alerts the driver of a possible pollution control device malfunction. The Class Vehicles’ diagnostic systems did not trigger this “check engine light,” because the defeat device was designed to evade EPA and CARB pollution controls.

123. In dozens of advertising campaigns and statements and in certifications of EPA and CARB compliance Volkswagen has falsely represented the Class Vehicles’ “green credentials” and performance.

124. Volkswagen engaged in a common course of conduct and conspiracy with the common purpose of defrauding Plaintiff and members of the Class into purchasing Class Vehicles at artificially inflated prices.

**The Volkswagen RICO Enterprise.**

125. Volkswagen conducted the affairs of an association-in-fact enterprise (the “Volkswagen RICO Enterprise”) through a pattern of racketeering activity, in violation of 18 U.S.C. § 1962(c).

126. The Volkswagen RICO Enterprise engaged in, and continues to engage in, interstate commerce, and its activities affect interstate commerce.

127. The Volkswagen RICO Enterprise is an association-in-fact enterprise comprised of the Defendants and Volkswagen Authorized Dealers in the United States. Each participant in the Volkswagen RICO Enterprise played a designated, well-defined role in the affairs of the



Volkswagen RICO Enterprise.

128. Volkswagen designed, manufactured, and sold to Volkswagen Authorized Dealers the Class Vehicles containing the defeat devices that are the subject of this Complaint. Volkswagen developed the advertising campaigns that misrepresented to Plaintiff and Class members the true nature of the Class Vehicles, which were not, contrary to Defendants' representations, environmentally-friendly, fuel-efficient, or EPA- or CARB-compliant. Volkswagen deceptively certified the Class Vehicles as EPA- and CARB-compliant. Further, Volkswagen lied to CARB and EPA officials about existence, full nature of, and extent of the defeat devices and the deception in place to prevent their detection.

129. The Volkswagen Authorized Dealers that sold and leased the Class Vehicles to Plaintiff and members of the Class were a critical element of the Volkswagen RICO Enterprise. Volkswagen sold the Class Vehicles to Volkswagen Authorized Dealers, who then sold or leased them to Plaintiff and members of the Class. Regardless of whether or not the Volkswagen Authorized Dealers knew that the Class Vehicles contained defeat devices that made Volkswagen's advertisements and representations false, the Volkswagen Authorized Dealers displayed those advertisements and repeated those misrepresentations. Indeed, Volkswagen Rico Enterprise required Volkswagen Authorized Dealers to display and repeat those misrepresentations in the Volkswagen and Audi Standard Dealer Agreements.

130. The Volkswagen RICO Enterprise has an ascertainable structure and purpose beyond the scope and commission of Volkswagens' predicate acts and conspiracy to commit such acts. The Volkswagen RICO Enterprise is separate and distinct from Defendants, and functions as a continuing unit. The members of the Volkswagen RICO Enterprise have distinct and separate roles and responsibilities.

131. At all relevant times, Volkswagen operated, controlled or managed the Volkswagen RICO Enterprise. Volkswagen's participation was critical for the success of the scheme to defraud because Volkswagen manufactured the Class Vehicles, designed and installed

the defeat devices, and concealed those devices from Plaintiff, Class members and regulatory authorities.

132. Section 1961(1)(B) of RICO defines “racketeering activity” as any act indictable under 18 U.S.C. §§1341 (mail fraud) and 1343 (wire fraud), among other statutes. As described in this Complaint, Volkswagen’s conduct violated both of these laws.

133. Volkswagen conducted the affairs of the Volkswagen RICO Enterprise through a “pattern of racketeering activity,” as defined by 18 U.S.C. §1961(5) by committing at least two acts of racketeering activity, *i.e.*, indictable violations of 18 U.S.C. §§1341 and 1343, within the past ten years. In fact, Volkswagen has committed dozens of acts of racketeering activity. Each racketeering act was related, had a similar purpose, involved the same or similar participants and method of commission, had similar results and impacted similar victims, including the Plaintiff and members of the Class.

134. Defendants’ multiple acts of racketeering activity were related to each other and amount to continued racketeering activity, and therefore constitute a “pattern of racketeering activity” as defined in 18 U.S.C. §1961(5).

**Predicate Act Violations of 18 U.S.C. §§1341 and 1343.**

135. For the purpose of executing the fraudulent scheme described in this Complaint, Volkswagen, in violation of 18 U.S.C. §1341 (mail fraud), placed in post offices and/or in authorized repositories, matter and things to be sent or delivered by the U.S. Postal Service, caused matter and things to be delivered by commercial interstate carriers, and received matter and things from the U.S. Postal Service and/or commercial interstate carriers, including, but not limited to, advertising materials, marketing and sales materials, correspondence, contracts, sales and leasing documents, Certificates of Compliance, communications with the EPA, CARB and other regulatory officials, and other materials relating to the Class Vehicles sold and leased to Plaintiff and Class members.

136. For the purpose of executing the fraudulent scheme described in this Complaint,

Volkswagen, in violation of 18 U.S.C. §1343 (wire fraud), transmitted and received by wire, matter and things, which include, but are not limited to, advertising materials, marketing and sales materials, correspondence, contracts, sales and leasing documents, Certificates of Compliance, communications with the EPA, CARB, and other regulatory officials, and other materials relating to the Class Vehicles sold and leased to Plaintiff and Class members.

137. For the purpose of executing the fraudulent scheme described in this Complaint, Volkswagen, in violation of 18 U.S.C. §§1341 and 1343, made numerous material misrepresentations about the Class Vehicles' environmental impact, fuel efficiency, and EPA- and CARB-compliance, and deliberately omitted many material facts, including concealing that the cars contained defeat devices that rendered them non-compliant with applicable emissions standards. Volkswagen made these misrepresentations and omissions with the intent and effect of inducing Plaintiff to rely on such misrepresentations and omissions.

138. Defendants' misrepresentations, omissions of material facts, acts of concealment, and failures to disclose, were knowing and intentional, and made for the purpose of deceiving and inducing Plaintiff and Members of the Class into purchasing and leasing Class Vehicles.

139. Defendants either knew or recklessly disregarded the fact that the misrepresentations and omissions described above and incorporated herein were material, and Plaintiff and Class members relied on the misrepresentations and omissions as set forth above.

140. Volkswagen's affirmative and deliberate misrepresentations regarding the Class Vehicles' environmental friendliness, fuel efficiency and performance, and omission of the true facts, were material factors in inducing Plaintiff and Class members to purchase and lease the Class Vehicles. Plaintiff and Class members relied on those misrepresentations and omissions and would have not purchased or leased the vehicles in their absence, or, at a minimum, would either have paid significantly less than they did or been unwilling to pay the requested purchase price.

141. Each act of deception, as described in this Complaint, constitutes a violation of 18

U.S.C. §§1341 (mail fraud) or 1343 (wire fraud), and constitutes an act of “racketeering activity” as defined in 18 U.S.C. §1961(5).

142. As a result, Plaintiff and Class members have been injured in their business and property within the meaning of 18 U.S.C. §1964(c). Plaintiff’s and Class members’ damages include, but are not limited to: purchasing or leasing Class Vehicles that they would not otherwise have purchased or leased; paying more for Class Vehicles than they would have otherwise paid if they had known the true facts concerning the defeat devices; and purchasing Class Vehicles, the value of which has been severely diminished, thus reducing their residual and/or resale value.

143. Volkswagen’s RICO violations directly and proximately caused injury to the business and property of Plaintiff and Class members, and Plaintiff and Class members are entitled to three times their actual damages, as well as injunctive and other equitable relief, plus their costs and reasonable attorneys’ fees.

#### **FOURTH CLAIM**

##### **Violation of the Magnuson-Moss Warranty Act (15 U.S.C. § 2301 *et seq.*)**

144. Plaintiff incorporates by reference each preceding and succeeding paragraph.

145. Plaintiff and the Class bring this claim under the Magnuson-Moss Warranty Act, 15 U.S.C. § 2301 *et seq.*

146. The Class Vehicles are consumer products as defined in 15 U.S.C. §2301(1).

147. Volkswagen is a supplier and warrantor as defined in 15 U.S.C. §2301(4), (5).

148. Plaintiff and the Class received written warranties as defined in 15 U.S.C. §2301(6)(A) and/or (B), which Volkswagen has breached.

149. Plaintiff and the Class are “consumers” as defined in 15 U.S.C. §2301(3). They are consumers because they bought a Class Vehicle and are entitled to enforce both written and implied warranties.

150. Pursuant to 15 U.S.C. § 2310(e), Plaintiff and the Class are not required to

provide Defendants notice of this class action and an opportunity to cure until the time the Court determines the representative capacity of Plaintiff pursuant to Fed.R.Civ.P. 23.

151. Volkswagen is liable to Plaintiff and the Class pursuant to 15 U.S.C. § 2310(d)(1) because it breached its written warranties.

152. Further, in connection with the sale of the Class Vehicles, Volkswagen gave an implied warranty under the Act. As part of that implied warranty, Volkswagen warranted that the Class Vehicle complied with all applicable federal and state regulations, including emission regulations. Volkswagen breached the implied warranty of merchantability.

153. Plaintiff and the Class are entitled to damages caused by Volkswagen's breaches of the warranties, including economic damages based upon either a return of Plaintiff's and Class Members purchase price; and/or the difference between the price paid for the Class Vehicle as warranted and the actual value of the Class Vehicle as delivered, and consequential damages.

154. In addition, Plaintiff and the Class are entitled to reasonable attorneys' fees and costs as determined by the Court.

### **FIFTH CLAIM**

#### **Violation of North Carolina Unfair and Deceptive Trade Practices Act (North Carolina Code §75.1, *et seq.*)**

155. Plaintiff incorporates by reference each preceding and succeeding paragraph.

156. Plaintiff brings this Claim on behalf of the North Carolina Subclass.

157. North Carolina Code §75.1, *et seq* prohibits methods of "unfair competition" which is defined by North Carolina Code § 75.1 as including any "unfair methods of competition in or affecting commerce, and unfair or deceptive acts or practices in or affecting commerce." Volkswagen has violated and continues to violate North Carolina's Unfair and Deceptive Trade Practices Act against engaging in "unlawful" business acts or practices, by, inter alia, the following:

- Violating the Sherman Act;

- Violating RICO;
- Violating the Magnuson-Moss Act;

158. Volkswagen also acted fraudulently and unfairly for purposes of section §75.1. Volkswagen's misrepresentations and omissions regarding the Class Vehicles' emissions, environmental standards, fuel efficiency, and performance in their advertising, public statements and marketing were a material factor in inducing the Plaintiff to purchase their Class Vehicle. Plaintiff suffered injury in fact and lost money and/or property as a result of Volkswagen's unlawful business acts and practices and North Carolina Subclass members have suffered harm when each was required to pay a purchase price for their Class Vehicles which they never would have purchased if the true facts were known; or paid a price in excess of what a North Carolina Subclass member would have paid if Volkswagen had accurately disclosed the Class Vehicles' characteristics and by reason of decreased resale value of the Class Vehicles purchased or leased.

159. As a result of Volkswagen's violations of the North Carolina Unfair and Deceptive Practices North Carolina Code §75.1, *et seq.*, Plaintiff and North Carolina Subclass members are entitled to equitable relief in the form of full restitution for the inflated sale price of the Vehicles.

160. Plaintiff and North Carolina Subclass members also seek an order enjoining Volkswagen from continuing their unlawful business practices and from such future conduct.

**SIXTH CLAIM**  
**Unjust Enrichment**

161. Plaintiff incorporates by reference each preceding and succeeding paragraph.

162. Plaintiff brings this claim for unjust enrichment on behalf of the nationwide Class under the common law of unjust enrichment, as there are no true conflicts (case-dispositive differences) among various states' laws of unjust enrichment.

163. In the alternative, Plaintiff brings this claim on behalf of the nationwide Class

under North Carolina law, because the Defendants' only United States assembly plant is located in Tennessee, and Tennessee has the most significant relationship to the issues and facts relevant to this claim.

164. Volkswagen received and retained a benefit from the Plaintiff and inequity has resulted.

165. Volkswagen benefitted through its unjust conduct, by selling Class Vehicles subject to the misrepresentation that they were EPA- and/or CARB-compliant and by failing to disclose its use of a defeat device in these Vehicles.

166. Plaintiff was charged a premium based on this misrepresentation, overpaid for these vehicles as a result, and/or would not have purchased these vehicles at all had their noncompliance with federal and state emissions laws been disclosed.

167. It is inequitable for Volkswagen to retain these benefits.

168. Plaintiff does not have an adequate remedy at law.

169. As a result of Volkswagen's conduct, the amount of its unjust enrichment should be disgorged, in an amount to be proven at trial.

**SEVENTH CLAIM**  
**Fraudulent Concealment**

170. Plaintiff incorporates by reference each preceding and succeeding paragraph.

171. Plaintiff brings this claim for unjust enrichment on behalf of the nationwide Class under the common law of fraudulent concealment, as there are no true conflicts (case-dispositive differences) among various states' laws of fraudulent concealment.

172. In the alternative, Plaintiff brings this claim on behalf of the nationwide Class under North Carolina law.

173. Volkswagen concealed and suppressed the material facts that the Class Vehicles did not comply with federal and state emissions laws and were spewing illegal amounts of NOx when they were represented to be EPA- and/or CARB-compliant. It also concealed and

suppressed the material fact that the Class Vehicles were equipped with a defeat device that prevented their proper testing under laboratory conditions for compliance with federal and state emissions laws and regulations.

174. Volkswagen took the various steps described herein to effectuate that concealment, such as false advertising and in false statements of compliance with federal and state emissions laws and regulations affixed to each of the Class Vehicles

175. Volkswagen took steps to ensure that its employees did not reveal these concealed facts to federal and state environmental regulators.

176. Volkswagen had a duty to disclose the concealed information because it:

- Had exclusive and/or far superior knowledge and access to the facts than Plaintiff and Class Members, and it knew the facts were not known to or reasonably discoverable by Plaintiff and the Class;
- Intentionally concealed the foregoing from Plaintiff; and
- Made incomplete representations about the compliance of the Class Vehicles with federal and state emissions laws and regulations, while purposefully withholding material facts from Plaintiff that contradicted these representations.

177. These omitted and concealed facts were material because a reasonable person purchasing, leasing or retaining the Class Vehicles would rely on them, and because they directly impact the price paid for the Class Vehicles and their resale value. Whether the Class Vehicles comply with federal and state emissions laws and regulations is a material concern to a consumer. Plaintiff and Class Members trusted Volkswagen not to sell or lease them vehicles that were non-compliant.

178. Volkswagen concealed and suppressed these material facts to falsely assure purchasers and consumers that the Class Vehicles complied with federal and state emissions laws and regulations, as represented by Volkswagen and reasonably expected by consumers.

179. Volkswagen actively concealed and/or suppressed these material facts, in whole



or in part, to protect its profits and to avoid recalls that would hurt the brand image of the Class Vehicles and cost Volkswagen money. Volkswagen concealed these facts at the expense of Plaintiff and the Class.

180. Plaintiff and the Class were unaware of these omitted material facts, and would not have acted as they did if they had known of the concealed and/or suppressed information.

181. Had they been aware of the non-compliance of the Class Vehicles with federal and state emissions laws and regulations and Volkswagen's callous disregard for those laws and regulations, Plaintiff and the Class either would have paid less for their Class Vehicles or would not have purchased or leased them at all. Plaintiff did not receive the benefit of his bargain as a result of Volkswagen's fraudulent concealment.

182. Because of the concealment and/or suppression of the facts, Plaintiff and the Class sustained damage because they own vehicles that diminished in value as a result of Volkswagen's concealment of, and failure to timely disclose, the non-compliance of the Class Vehicles with federal and state emissions laws and regulations.

183. The value of all Class members' Class Vehicles has diminished as a result of Volkswagen's fraudulent concealment of the non-compliance of the Class Vehicles with federal and state emissions laws and regulations and has made any reasonable consumer reluctant to purchase any of the Class Vehicles, let alone pay what otherwise would have been fair market value for the vehicles.

184. Accordingly, Volkswagen is liable to the Class for their damages in an amount to be proven at trial.

185. Volkswagen's acts were done maliciously, oppressively, deliberately, with intent to defraud, and in reckless disregard of Plaintiff and the Class's rights and well-being, and with the aim of enriching Volkswagen's conduct, which exhibits the highest degree of reprehensibility, being intentional, continuous, placing others at risk of death and injury, and affecting public safety, warrants an assessment of punitive damages in an amount sufficient to

deter such conduct in the future, which amount is to be determined according to proof.

### **PRAYER FOR RELIEF**

WHEREFORE, Plaintiff prays that the Court enter judgment on his behalf and on behalf of the Class and the North Carolina Subclass, as follows:

A. Order the appointment of an independent External Compliance Monitor to monitor Volkswagen's compliance with federal and state environmental laws;

B. Order Volkswagen to pay a portion of its annual net profits into an independent fund administered by third parties approved by the Court who can disburse the funds to non-profit organizations that seek to monitor, educate people about, and/or remediate the deleterious environmental effects of vehicular diesel fuel emissions;

C. Order that this action may proceed as a class action, with Plaintiff as the designated Class representative for the Class; Plaintiff as designated Class representatives for the North Carolina Subclass; and Plaintiff's counsel as Class and Subclass Lead or Liaison Counsel;

D. Adjudge and decree that Volkswagen has violated the CAA, the Sherman Act, RICO, the Magnuson-Moss Act, the CLRA, North Carolina's Unfair and Deceptive Trade Practices Act, and the common law of unjust enrichment and fraudulent concealment and that Plaintiff and the members of the Class and the North Carolina Subclass have been injured in their business and property as a result of Volkswagen's violations;

E. Order that Plaintiff and the members of the Class and North Carolina Subclass recover damages sustained by them, to the extent provided by law, and that a judgment in favor of Plaintiff and the Class and the North Carolina Subclass be entered against Volkswagen in an amount to be trebled in accordance with such laws;

F. To the extent provided by law, enjoin and restrain Volkswagen, its subsidiaries, affiliates, successors, transferees, assignees and the respective officers, directors, partners, agents, and employees thereof and all other persons acting or claiming to act on their behalf from continuing to violate the CAA, the Sherman Act, RICO, the Magnuson-Moss Act, CLRA, North

Carolina Unfair Competition and Deceptive Trade Practices Act, and the common law of unjust enrichment and fraudulent concealment;

G. Order Volkswagen to pay restitution or damages to Plaintiff and members of the Class and the North Carolina Subclass and to disgorge the profits unlawfully acquired and retained by Volkswagen;

H. Award Plaintiff and members of the Class and the North Carolina Subclass pre-judgment and post-judgment interest, and order that such interest be awarded at the highest legal rate from and after the date of service of the initial complaint in this action;

I. Award Plaintiff and members of the Class and the North Carolina Subclass their costs of this suit, including reasonable attorneys' fees as provided by law; and

J. Order such other or further relief as may be just and proper.

#### **IX. JURY TRIAL DEMAND.**

Pursuant to Federal Rule of Civil Procedure 38(b), Plaintiff demands a trial by jury of all of the claims asserted in this Complaint so triable.

DATED: October 9, 2015

Respectfully submitted,

By: /s/ Scott N. Brown, Jr.  
Scott N. Brown, Jr. BPR No. 1212  
Joseph R. White, BPR No. 13459  
Joseph Alan Jackson II, BPR No. 30203  
Spears, Moore, Rebman & Williams, P.C.  
801 Broad Street  
6th Floor  
Pioneer Building  
Chattanooga, TN 37402  
Telephone: 423-756-7000  
Fax: 423-756-4801  
[snb@smrw.com](mailto:snb@smrw.com)  
[jrw@smrw.com](mailto:jrw@smrw.com)  
[jaj@smrw.com](mailto:jaj@smrw.com)

Larry S. McDevitt, N.C. Bar No. 5032  
David M. Wilkerson, N.C. Bar No. 35742  
The Van Winkle Law Firm  
11 N. Market Street  
Asheville, NC 28801  
Telephone: 828-258.2991  
Fax: 828-257-2767  
[lmcdevitt@vwlawfirm.com](mailto:lmcdevitt@vwlawfirm.com)  
[dwilkerson@vwlawfirm.com](mailto:dwilkerson@vwlawfirm.com)